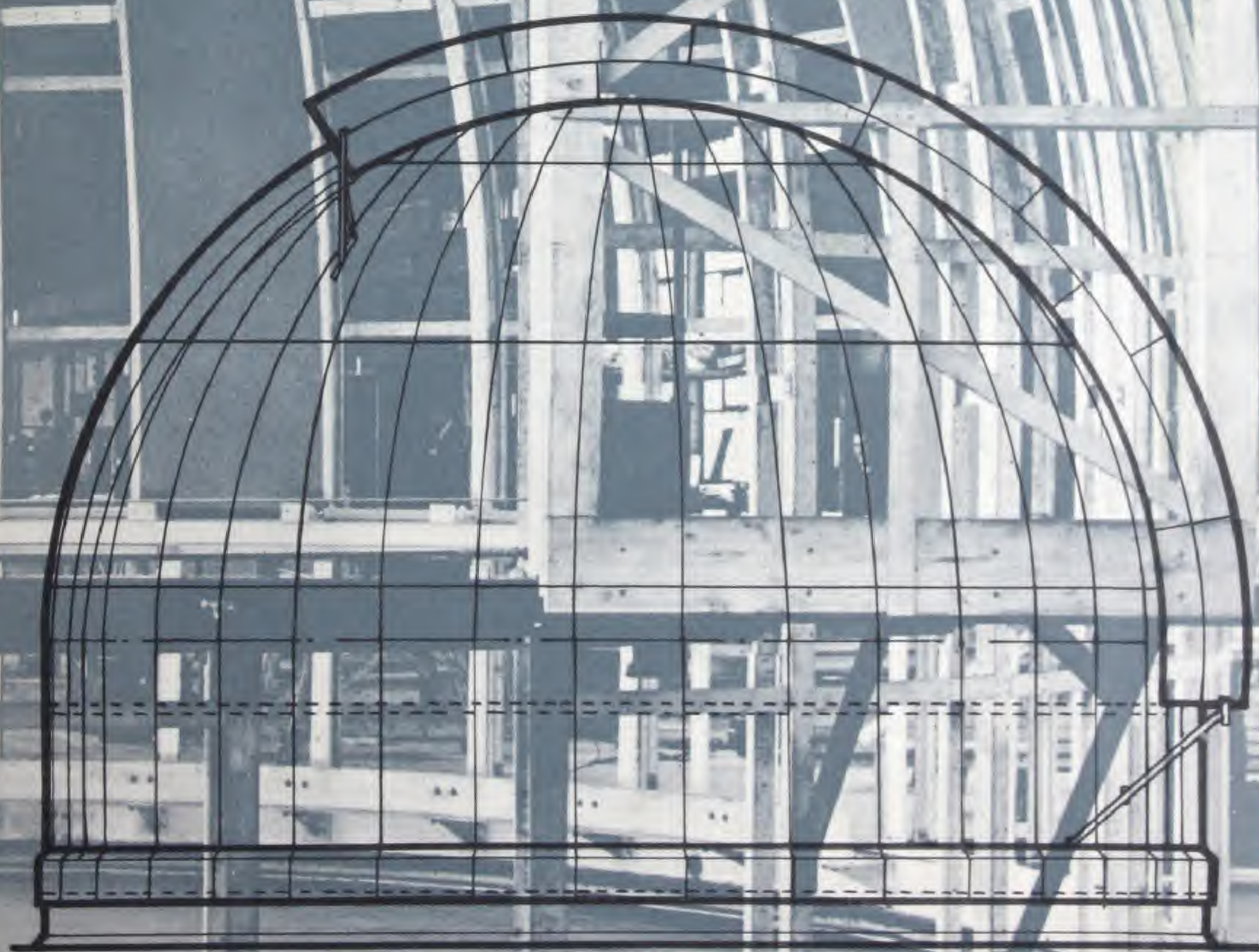


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W. S. WAIN QUINN

# HOPE'S PATENT GLAZING









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J. EDWIN QUINN  
ARCHITECT

By.....By.....



*Publication No. 333*

*November 1959*

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PATENT GLAZING  
*and*  
LANTERN LIGHTS

HENRY HOPE & SONS LTD

HALFORD WORKS • SMETHWICK • BIRMINGHAM

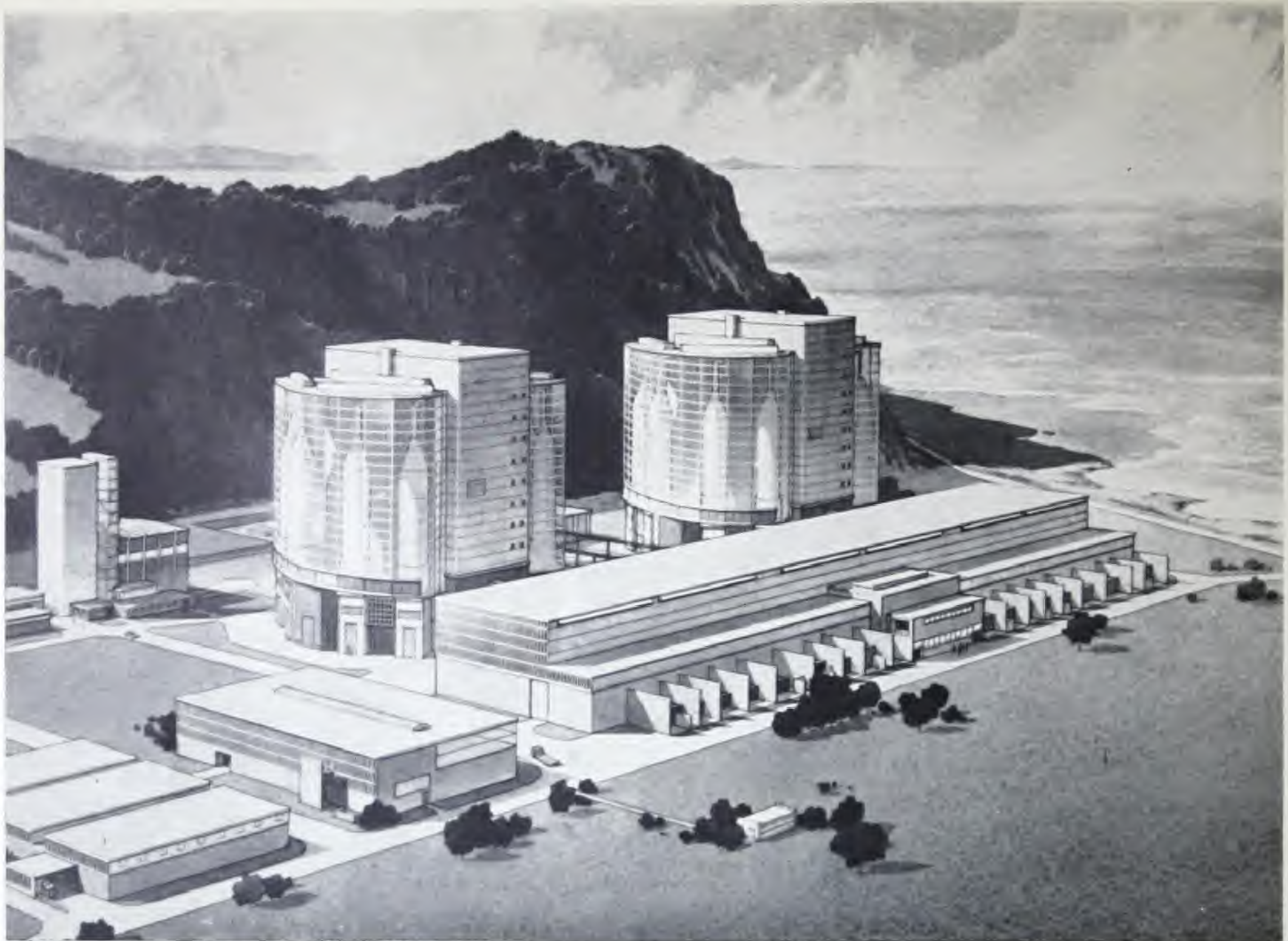
Telephone: SMethwick 0891      Telegrams: Conservatory Telex Birmingham

LONDON Office & Showrooms • 17 & 18 BERNERS STREET, W.1

Telephone: MUSeum 8412 • Telegrams: Buntline Rath



250,000 sq. ft.  
HOPE'S *Vertical Patent Glazing*



HUNTERSTON NUCLEAR GENERATING STATION · AYRSHIRE  
for the South of Scotland Electricity Board

*GEC • Simon-Carves Atomic Energy Group  
Howard V. Lobb & Partners, Consultant Architects*

HOPE'S Lead-clothed Steel Glazing Bars (*see pages 7 and 10*) were chosen for this Nuclear Generating Station which faces the Isle of Arran across the Firth of Clyde. The two Reactor Buildings, approximately 200 feet high, are largely enclosed in our Patent Glazing. The contract includes both Single and Double Patent Glazing, and also electrically controlled continuous opening lights.



# HOPE'S PATENT GLAZING



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BIRMINGHAM ·

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Telegrams · Buntline Rath*



# 1818 HOPE'S 1959

WE have been engaged in the Patent Glazing trade for over 70 years, and our staff have experience of many types of roof construction in widely differing conditions of climate and atmosphere. Each type of glazing bar illustrated in this catalogue has special characteristics which have been developed in the light of our long practical experience, and we like our customers to give us full particulars of local conditions so that we can advise on the type of glazing bar most suited to the particular contract.

**HOPE'S Double Patent Glazing** achieves a high degree of thermal insulation without restricting the admission of daylight. To this end our Double Patent Glazing Bars (*pages 10 & 11*) provide cushioned and non-conducting support for two layers of glass, between which is enclosed a cavity of still air. Heat loss through this system is half that through single patent glazing, and condensation is much reduced.

It is customary to use  $\frac{1}{4}$  in. cast glass for the outer pane, and wire reinforced glass for the inner pane so that the risk of falling fragments in case of fire or breakage may be reduced as much as possible.

In extreme cases of humidity we also offer a specially insulated aluminium bar which has been designed to eliminate the 'cold bridge' element (direct conduction of cold from external to internal surfaces of the bars themselves).

**Ventilation** Experience over many years in our own engineering shops has convinced us that no system of forced ventilation, however efficient, is as satisfactory to the man on the bench as natural ventilation: the open window or rooflight he can see for himself.

Opening lights, whether in roof or sidewall glazing, are usually hinged at top, and can be of any size, ranging from single-pane ventilators to continuous opening lights 200 ft. long (*see pages 26-37, and 40*).

**Sliding Roof Lights** Under certain conditions hinged opening lights may not be sufficiently positive, and where sudden accumulations of steam or fumes have to be cleared quickly, as in laundries or foundries, HOPE'S Sliding Glazed Roof Lights have been found very successful.

By this means large apertures in the roof can be opened up at the touch of an electric push-button, and the 'open air' effect has been most popular with workpeople.

(Details on page 38)



*Gearing* We design and manufacture gearing for operating ventilators in both roof and sidewall glazing, and have published a comprehensive catalogue on this subject of ventilation by remote control, copies of which we shall be pleased to supply on request. *List No. 267*

### *Domes, Lanterns, Laylights and Skylights*

We close this book with a brief illustrated review of some of the interesting work produced by our Lantern Light Department.

---

## FIXING & GLAZING

We have a large staff of trained engineers engaged in the erection of Patent Glazing, Lantern Lights and Gearing in all parts of the British Isles.

They have been specially trained in all branches of their work, and can fix a single domelight or organise the glazing of a large acreage of patent glazing complete with opening lights and electric gearing.

We recommend that all installations great and small, be put in our hands, and our estimates (except for export contracts) invariably include for fixing and glazing complete on site. For large overseas contracts we are always prepared to send a skilled supervisor to ensure that our materials are properly installed.



B.S.A. Waverley Works

*Holland W. Hobbiss, F.R.I.B.A., Architect*



# Specifications for Architects & Engineers

PATENT GLAZING to consist of HOPE'S Lead-clothed Glazing Bars, constructed of a rolled steel bulb tee bar, dipped in calcium plumbate paint stoved on and totally enclosed in a jointless lead sheath hermetically sealed.

**1** The lead sheath to be formed with a ridge on the bulb, two independent wings for dressing on to the glass and to have internal condensation channels.

The glazing bar to be of a suitable strength for the span involved.

The glass to be bedded on greased asbestos cords, fitted into grooves in the lead sheath and held in position by means of a brass glass stop fitted to foot of bar and glazed with  $\frac{1}{4}$ " . . . glass.

Bars to be spaced at  $24\frac{1}{2}$ " centres for 24" glass.

for details see page 7



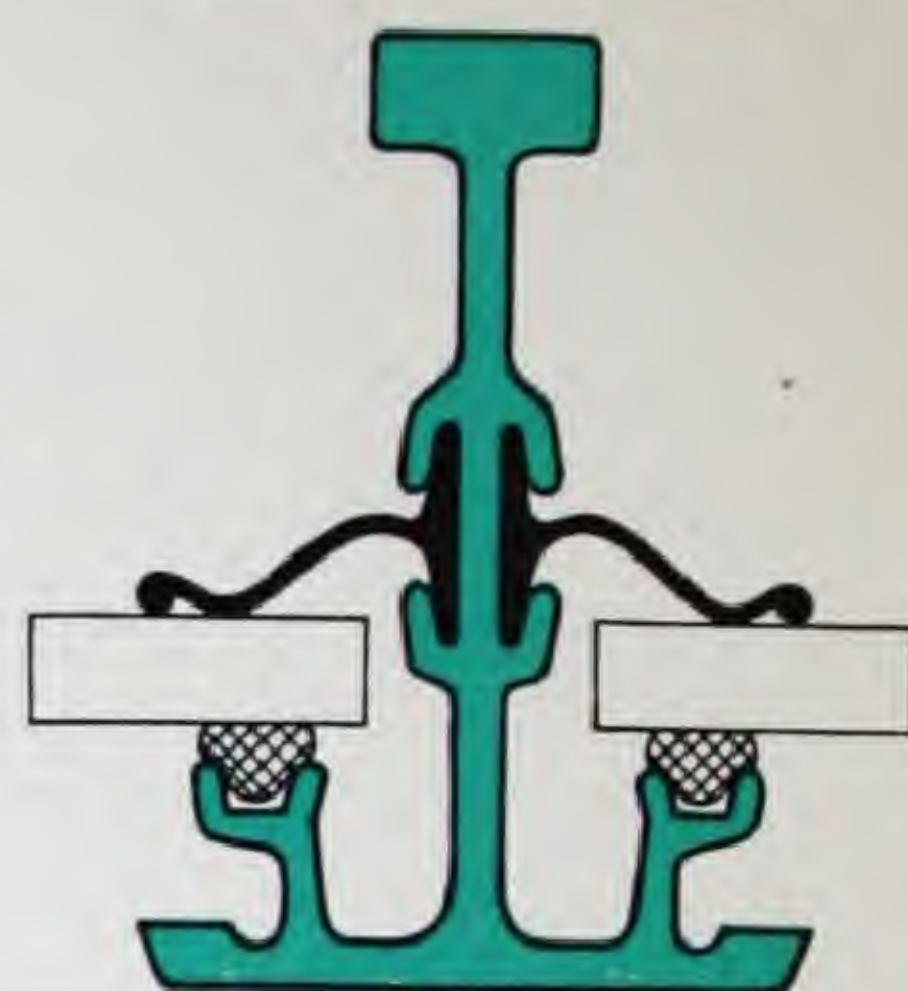
PATENT GLAZING to consist of HOPE'S Extruded Aluminium Glazing Bars in alloy HE9WP, bar to have incorporated in it continuous extruded lead wings for dressing on to the glass and suitable grooves for fitting asbestos cord.

**2** The glazing bar to be of suitable strength for the span involved.

The glass to be bedded on greased asbestos cord fitted into grooves in the bar and held in position by an extruded aluminium glass stop at foot of bar fixed by means of aluminium bolt and nut, and glazed with  $\frac{1}{4}$ " . . . glass.

Bars to be spaced at  $24\frac{1}{2}$ " centres for 24" glass.

for details see page 8

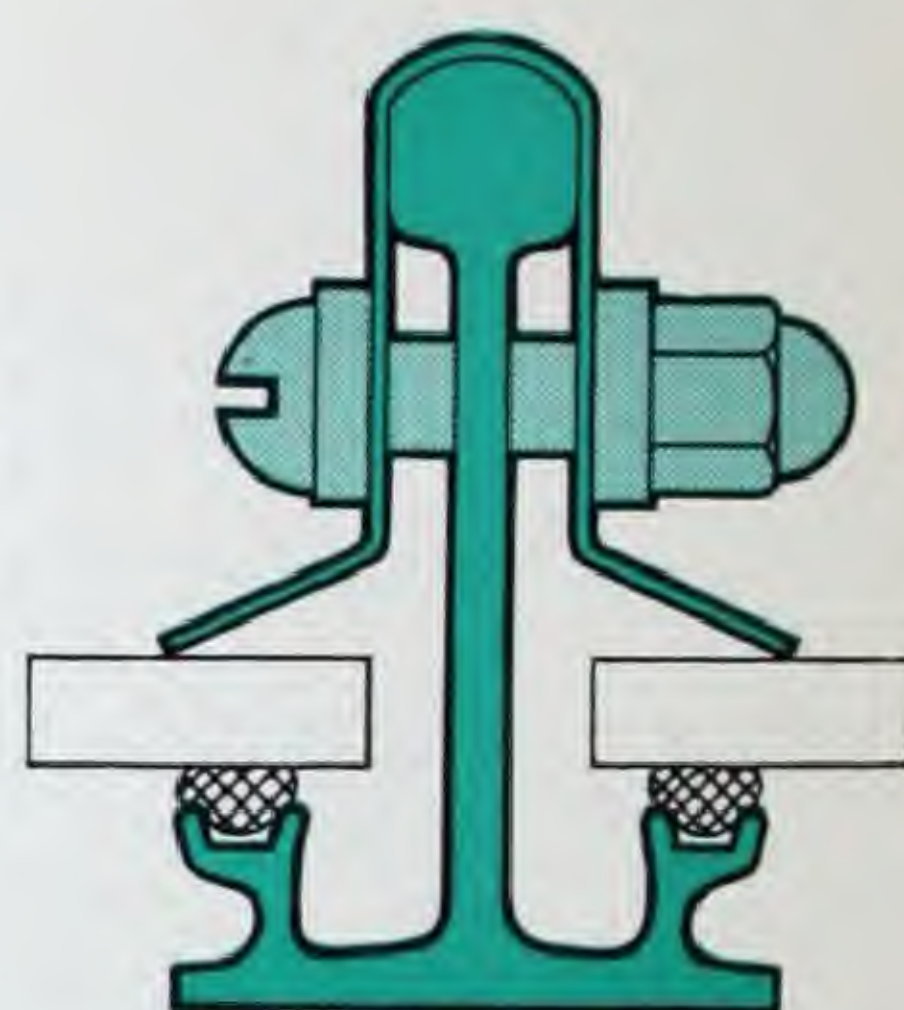


PATENT GLAZING to consist of HOPE'S Extruded Aluminium Glazing Bars in alloy HE9WP, and fitted with a continuous aluminium capping of 21 gauge commercially pure aluminium. The capping to be secured to the bar by means of aluminium screws and domed nuts. The glazing bar to incorporate suitable grooves for fitting asbestos cord and to be of suitable strength for the span involved.

**3** The glass to be bedded on greased asbestos cord fitted into grooves in the glazing bar and held in position by an extruded aluminium glass stop at foot of bar and glazed with  $\frac{1}{4}$ " . . . glass.

Bars to be spaced at  $24\frac{3}{8}$ " centres for 24" glass.

for details see page 9



## Glass

HOPE'S Patent Glazing is usually glazed with one of the three illustrated on the right; all are  $\frac{1}{4}$ " thick, maximum length 11'.

Polished Plate Glass,  $\frac{1}{4}$ " thick, has also been used in vertical patent glazing, and can be supplied reinforced with square or hexagon wire mesh.

(Max. lengths: Polished Plate 10' 0"; wired 9' 0")

32 oz. Clear Sheet Glass is frequently used for vertical glazing in lengths up to 6' 8", but is not supplied with wire reinforcement.

Heat-absorbing Glass (not wire reinforced) is available in lengths up to 10' 0".



$\frac{1}{4}$ " ROUGH CAST GLASS



$\frac{1}{4}$ " WIRED CAST GLASS



$\frac{1}{4}$ " GEORGIAN WIRED CAST GLASS



# HOPE'S *Lead-clothed Steel* GLAZING

Lead ridge prevents damage to sheath when planks are placed on top of bar

## FULL SIZE SECTIONS

$1\frac{1}{4}" \times 1\frac{1}{2}" \times \frac{3}{16}"$  Steel Tee stove painted and sheathed in lead

Continuous double lead wings dressed on to glass for perfect weathering



Greased asbestos cord ensures perfect seating of glass

### B1 Bar for spans up to 7' 6"

For purposes of calculation, weight per foot super of B1 Bar with  $\frac{1}{4}"$  glass, can be taken as  $5\frac{1}{4}$  lb

Bulb at top of bar adds strength and rigidity

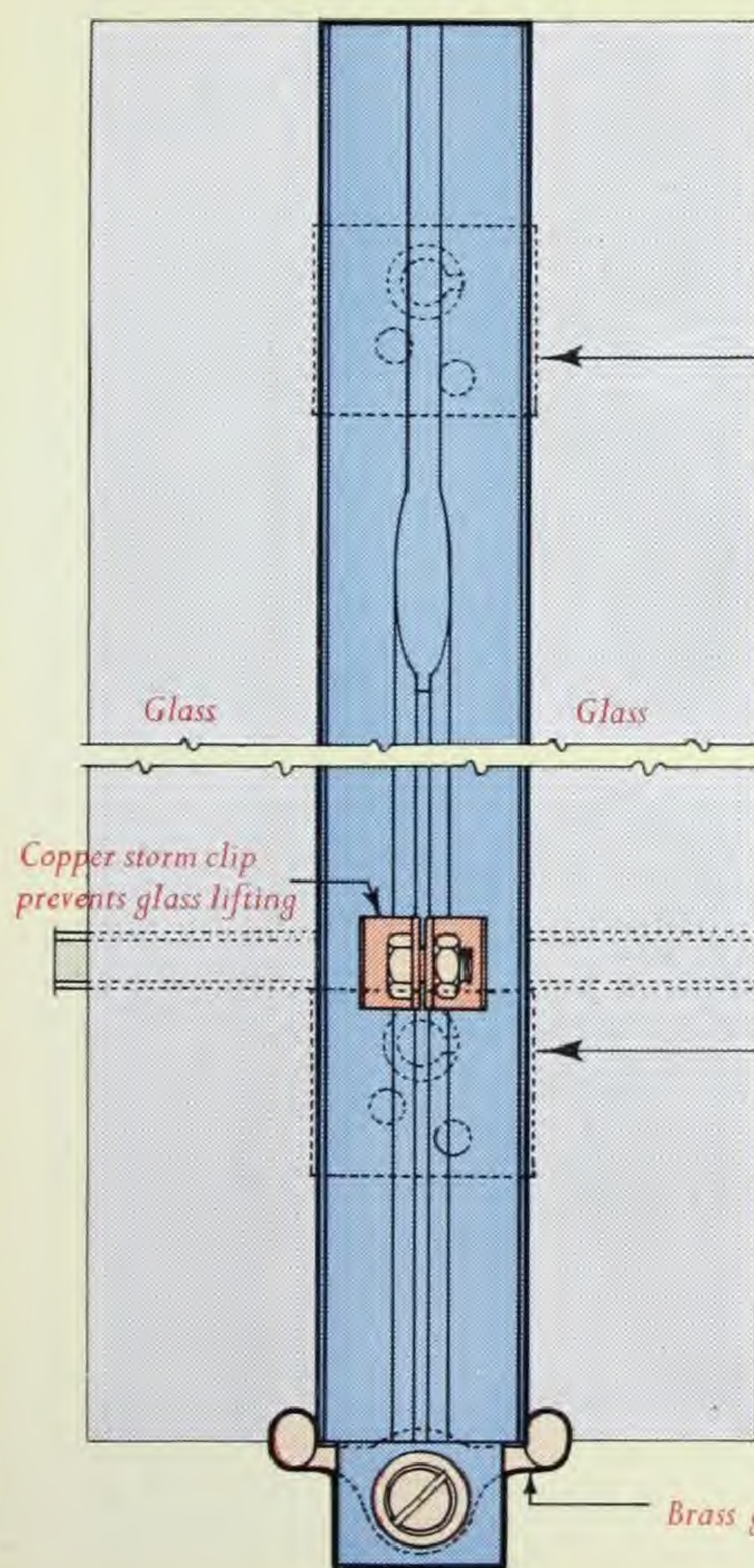
$1\frac{1}{4}" \times 2\frac{1}{4}" \times \frac{3}{16}"$  Steel Tee stove painted and sheathed in lead



### O3 Bar for spans up to 11' 0"

For purposes of calculation, weight per foot super of O3 Bar with  $\frac{1}{4}"$  glass, can be taken as  $5\frac{3}{4}$  lb

## PLAN VIEW



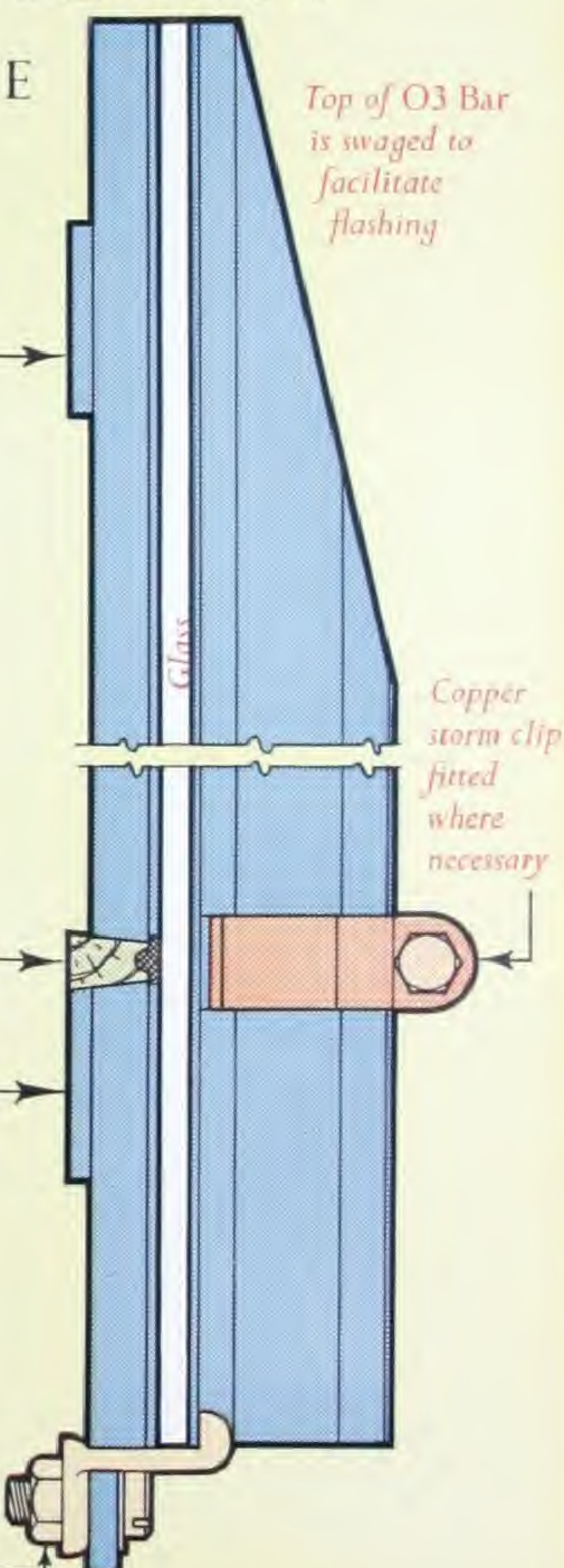
## HALF FULL SIZE DETAILS

ONE-HOLE FIXING PLATE for Steelwork

ONE-HOLE FIXING PLATE for Steelwork

Brass glass stop secured by  $\frac{3}{8}"$  dia. brass nut and bolt

## SIDE VIEW



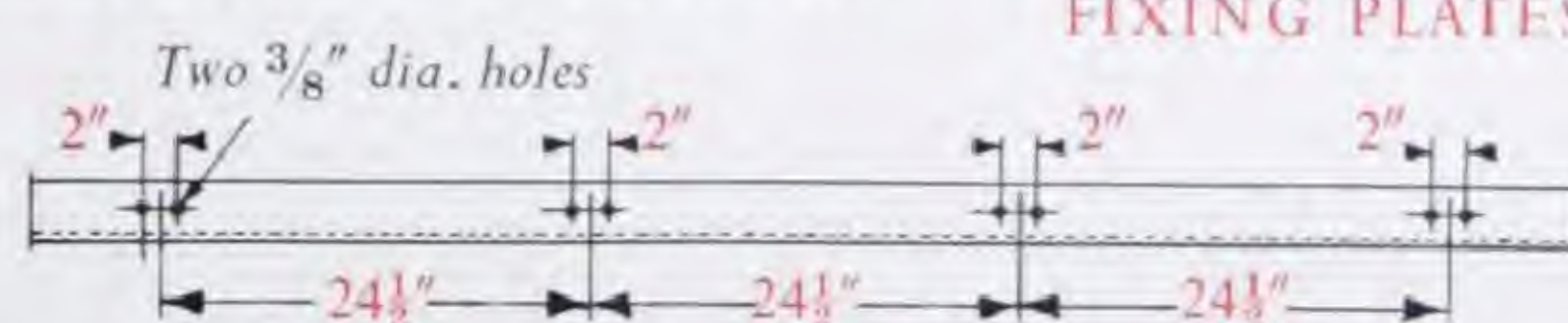
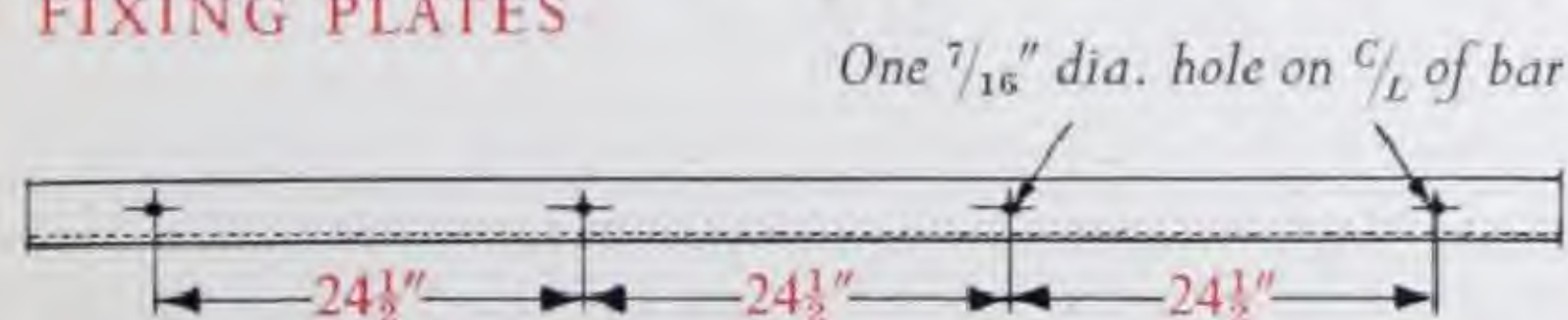
Top of O3 Bar is swaged to facilitate flashing

Copper storm clip fitted where necessary

### ONE-HOLE FIXING PLATES

## STEELWORK DRILLING POSITIONS

### TWO-HOLE FIXING PLATES



Bars are usually spaced at  $24\frac{1}{2}"$  centres for 24" glass but these centres can be varied.

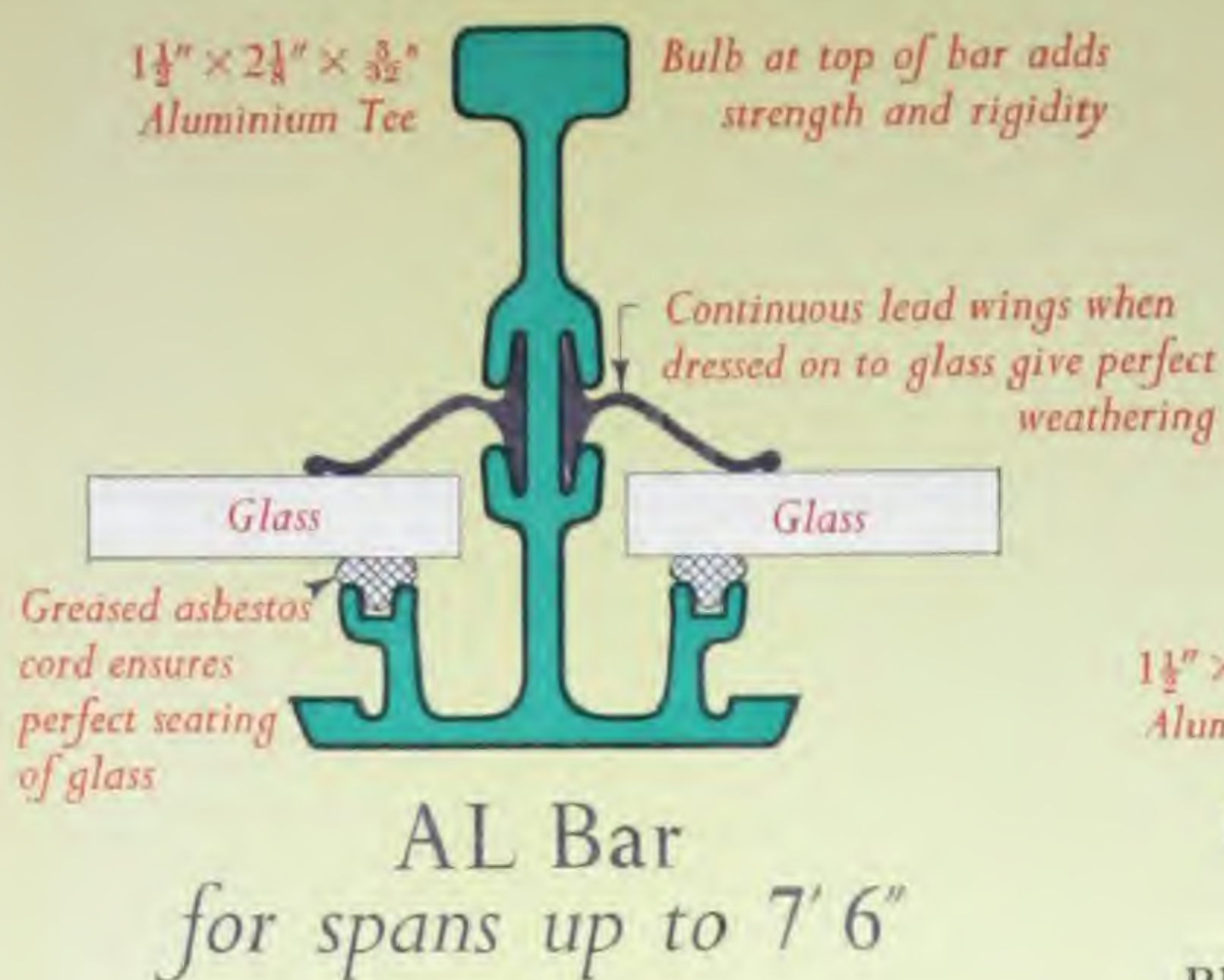
Unless otherwise stated it will be assumed that fixing holes in purlins will be drilled to standard back-marks.

See page 10 for Lead-clothed Double Glazing Bar

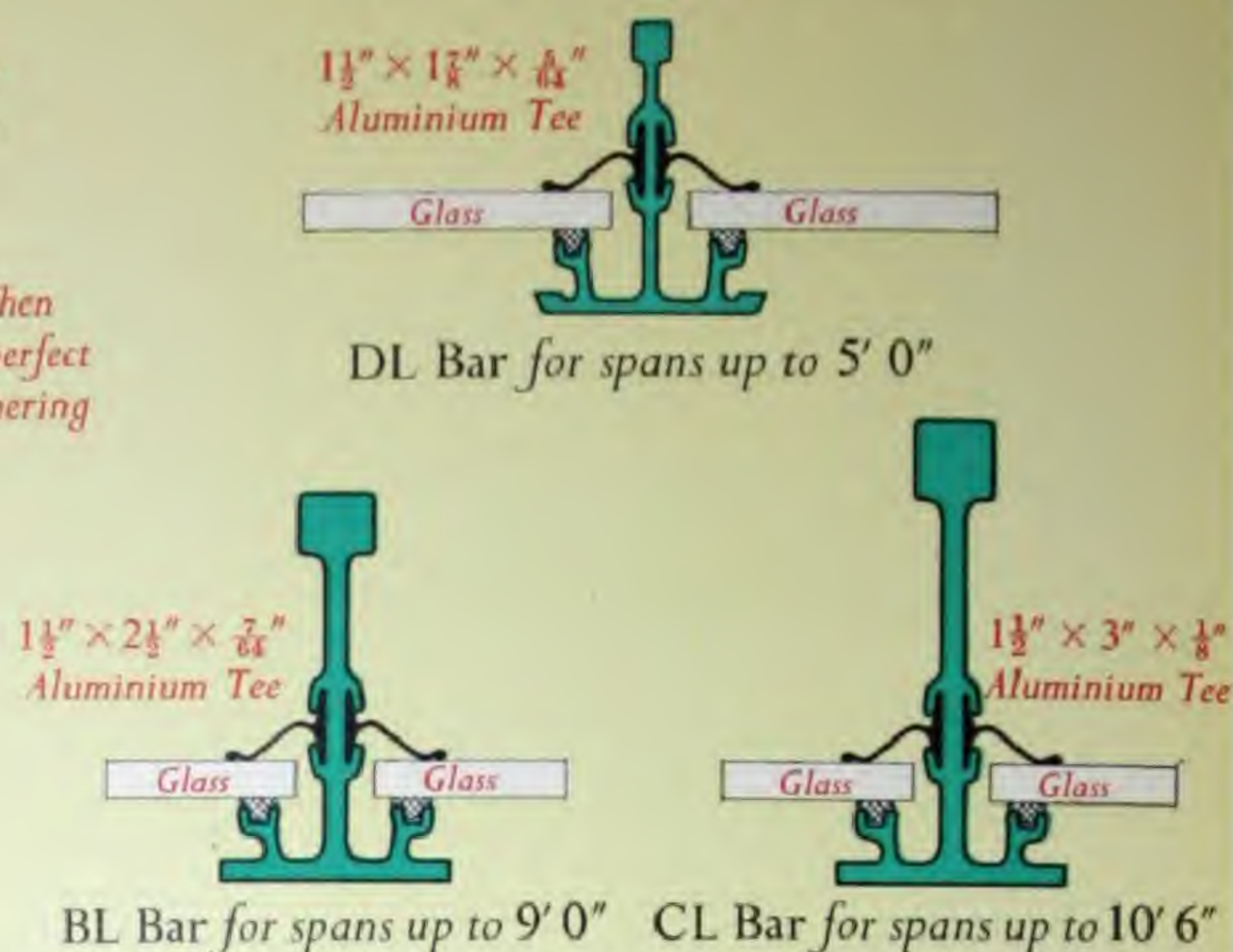


# HOPE'S Aluminium Glazing with Lead Wings

## FULL SIZE

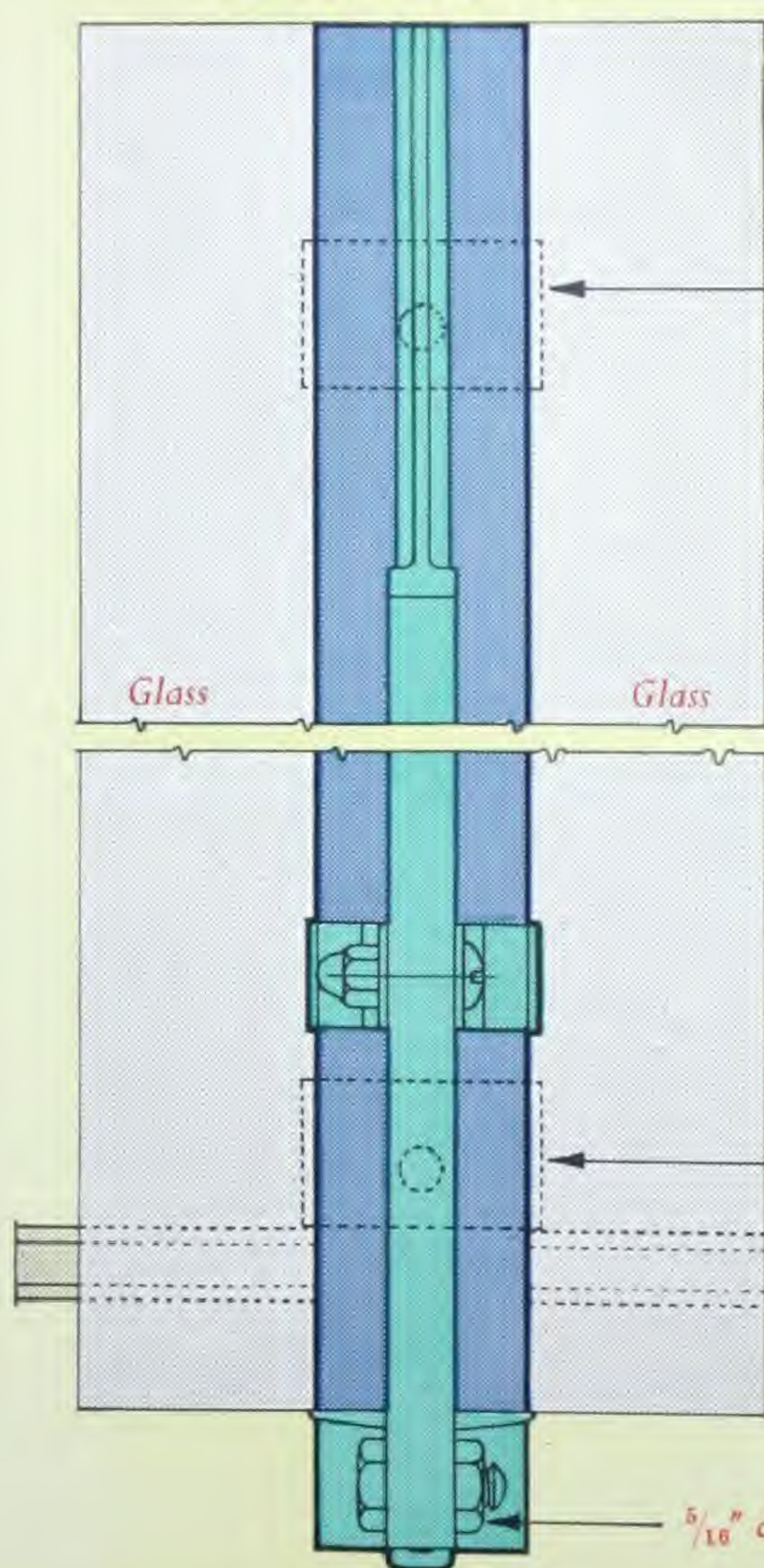


## HALF FULL SIZE



For purposes of calculation, weight per foot super of aluminium glazing bars on this page with  $\frac{1}{4}$ " glass, can be taken as 4 lb

## PLAN VIEW



## SIDE VIEW

### HALF FULL SIZE DETAILS

**ONE-HOLE FIXING PLATE**  
for Steelwork

**ONE-HOLE FIXING PLATE**

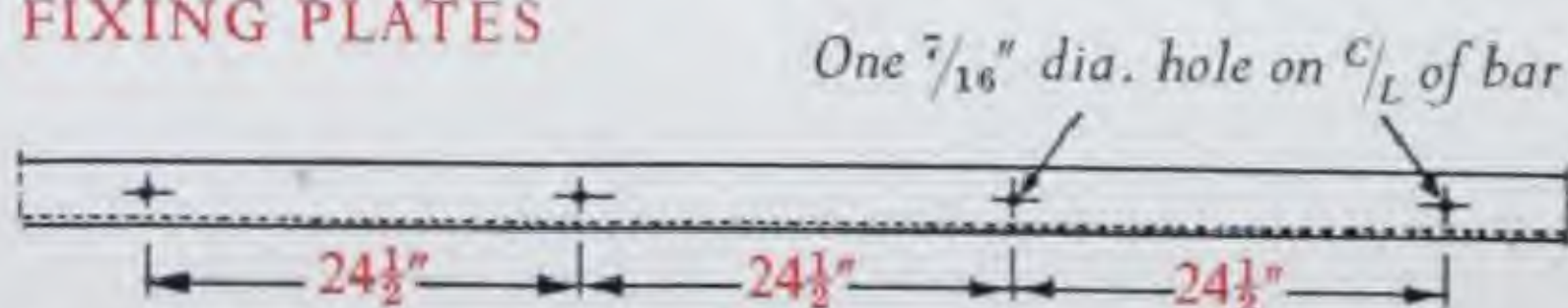
Draught fillet with asbestos cord seating for glass

Aluminium glass stop and  $\frac{5}{16}$ " dia. aluminium nut and bolt

Top of bar is swaged to enable flashing to be dressed flat

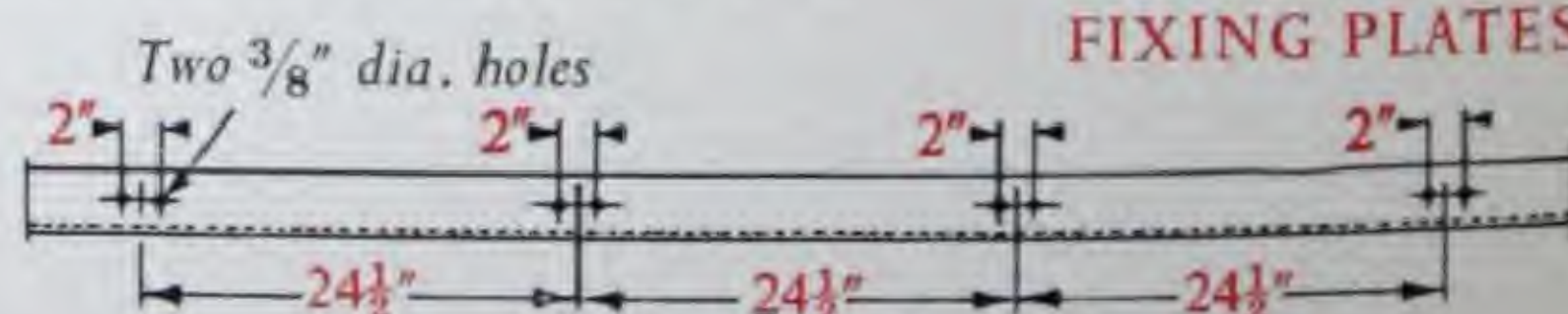
Storm clip fitted where necessary

### ONE-HOLE FIXING PLATES



## STEELWORK DRILLING POSITIONS

### TWO-HOLE FIXING PLATES



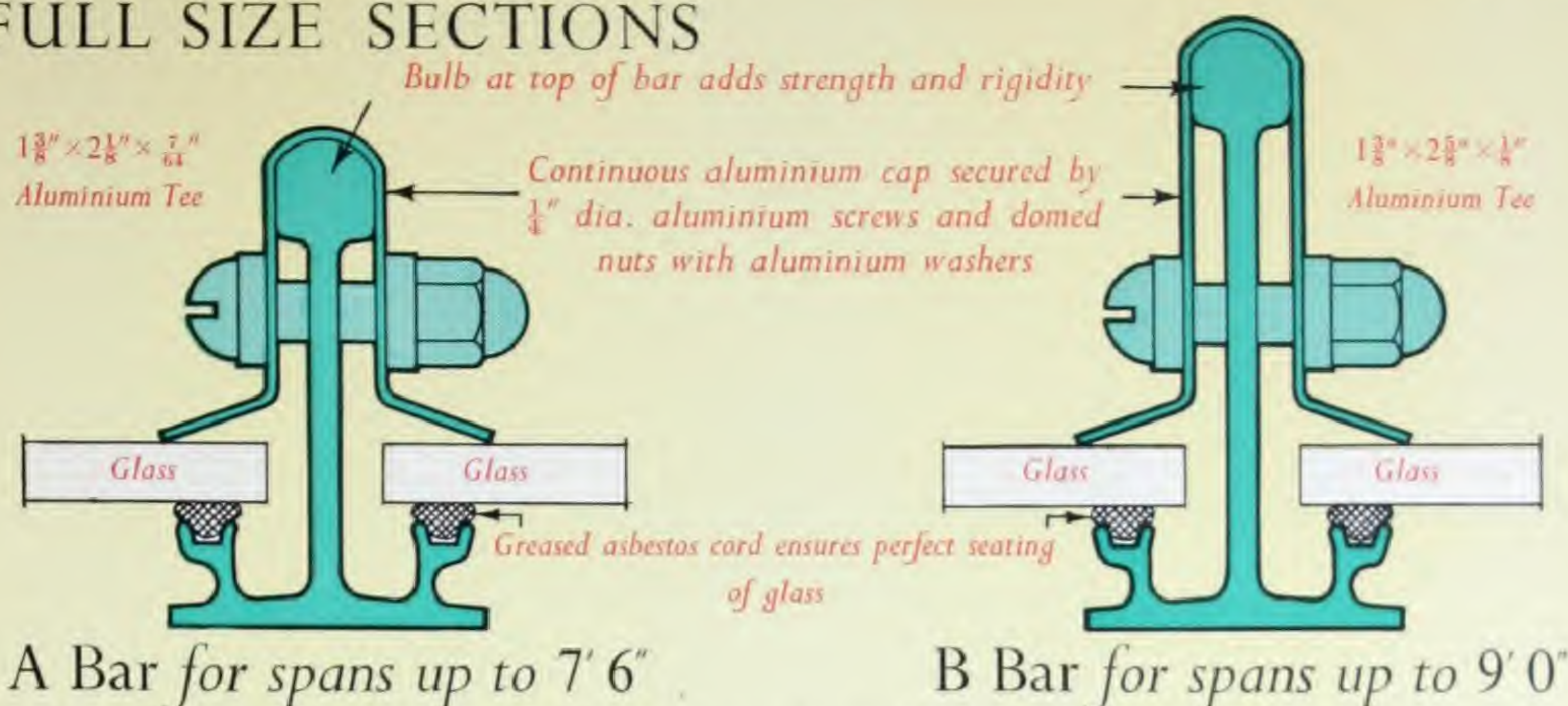
Bars are usually spaced at  $24\frac{1}{2}$ " centres for 24" glass but these centres can be varied. Unless otherwise stated it will be assumed that fixing holes in purlins will be drilled to standard back-marks.

See page 11 for Aluminium Double Glazing Bar

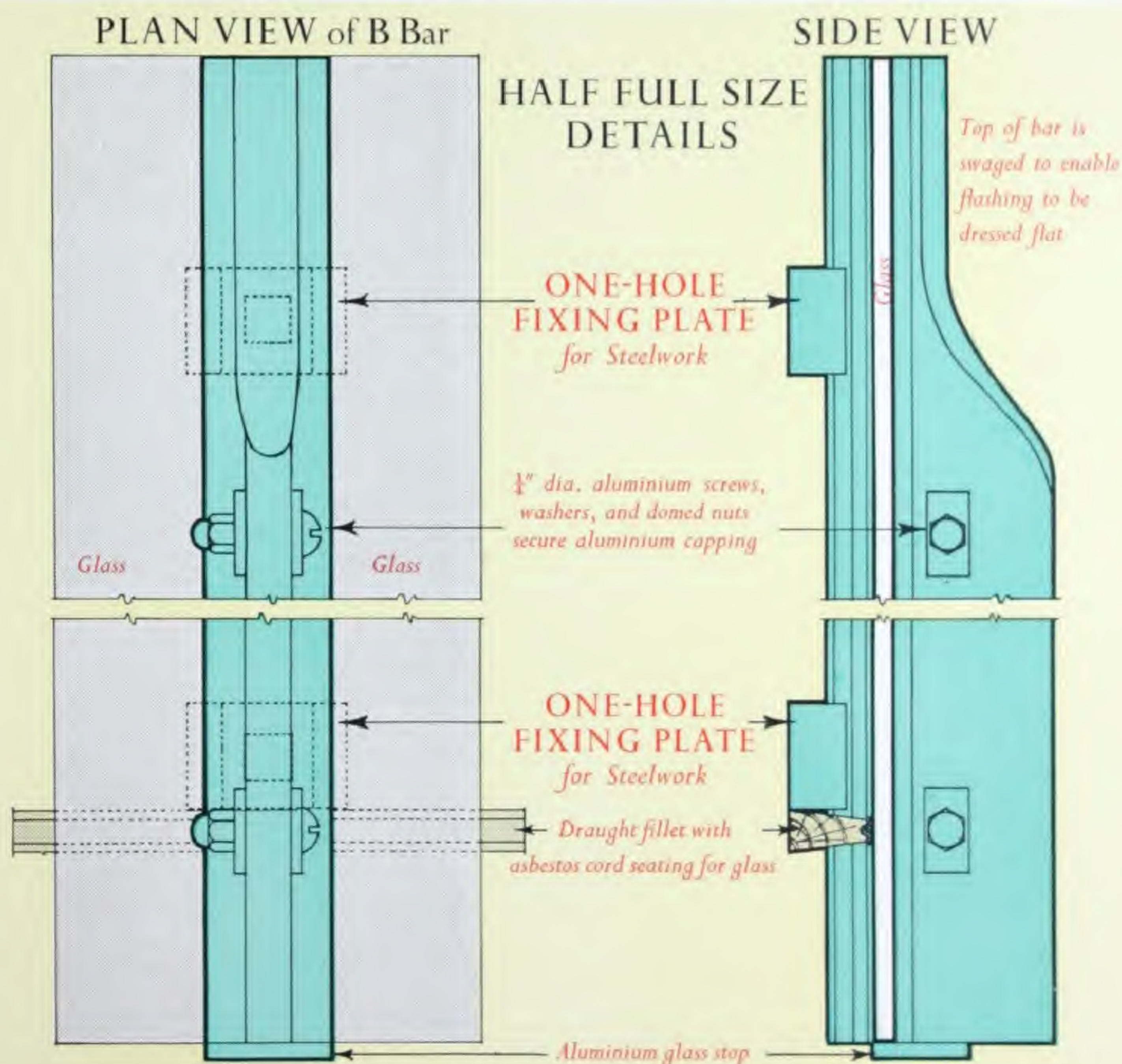


# HOPE'S Aluminium Glazing with Aluminium Capping

## FULL SIZE SECTIONS



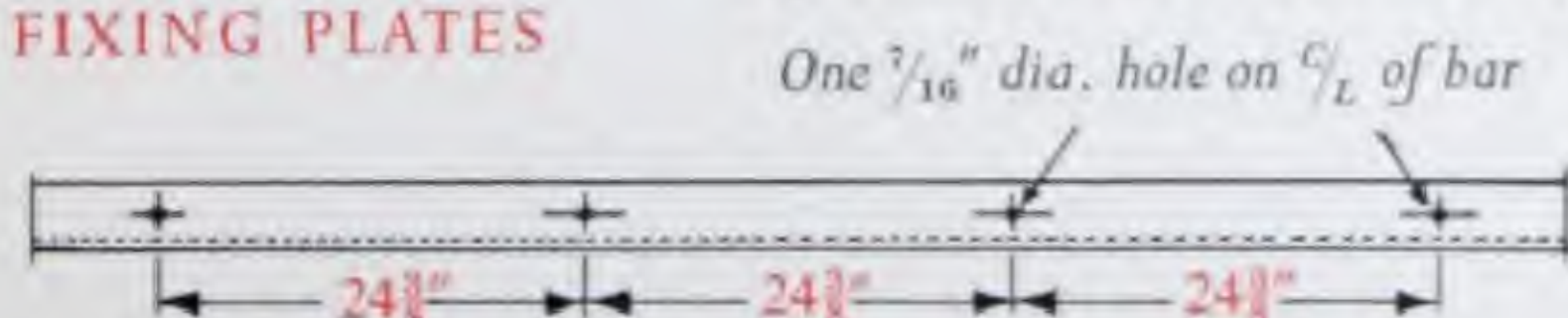
For purposes of calculation, weight per foot super of aluminium glazing bars on this page with  $\frac{1}{4}''$  glass, can be taken as 4 lb



### ONE-HOLE FIXING PLATES

### STEELWORK DRILLING POSITIONS

### TWO-HOLE FIXING PLATES



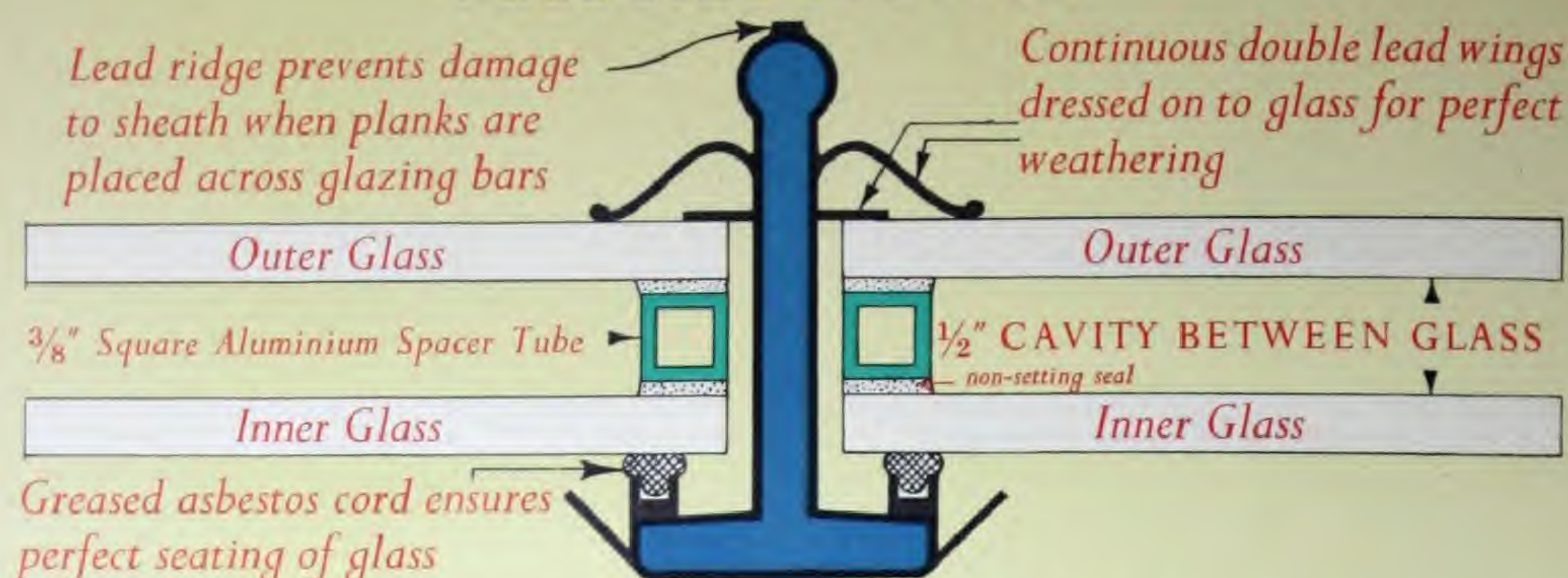
Bars are usually spaced at 24 $\frac{3}{8}''$  centres for 24" glass but these centres can be varied. Unless otherwise stated it will be assumed that fixing holes in purlins will be drilled to standard back-marks.

See page 11 for Aluminium Double Glazing Bar



# HOPE'S *Lead-clothed Steel Double Glazing*

## FULL SIZE SECTION



DO3 Bar for spans up to 10' 0"

For purposes of calculation, weight per foot super of DO3 Bar including 2 sheets of 1/4" glass can be taken as 9 1/4 lb

**HOPE'S Double Patent Glazing** is recommended for buildings where the conservation of artificial heat and the reduction of condensation are important, for the following reasons:

- 1 Heat losses through single patent glazing are halved by the use of HOPE'S Double Patent Glazing and the indoor temperature more efficiently controlled.
- 2 Fuel consumption and heating costs are lowered.
- 3 The inner glazing, being isolated from the outer air, is kept at a temperature nearer to that of the inside of the building, thus avoiding down draughts and condensation.
- 4 To prevent dust penetration, the edges of the glass are bedded.
- 5 Double Patent Glazing also provides considerable insulation against noise.

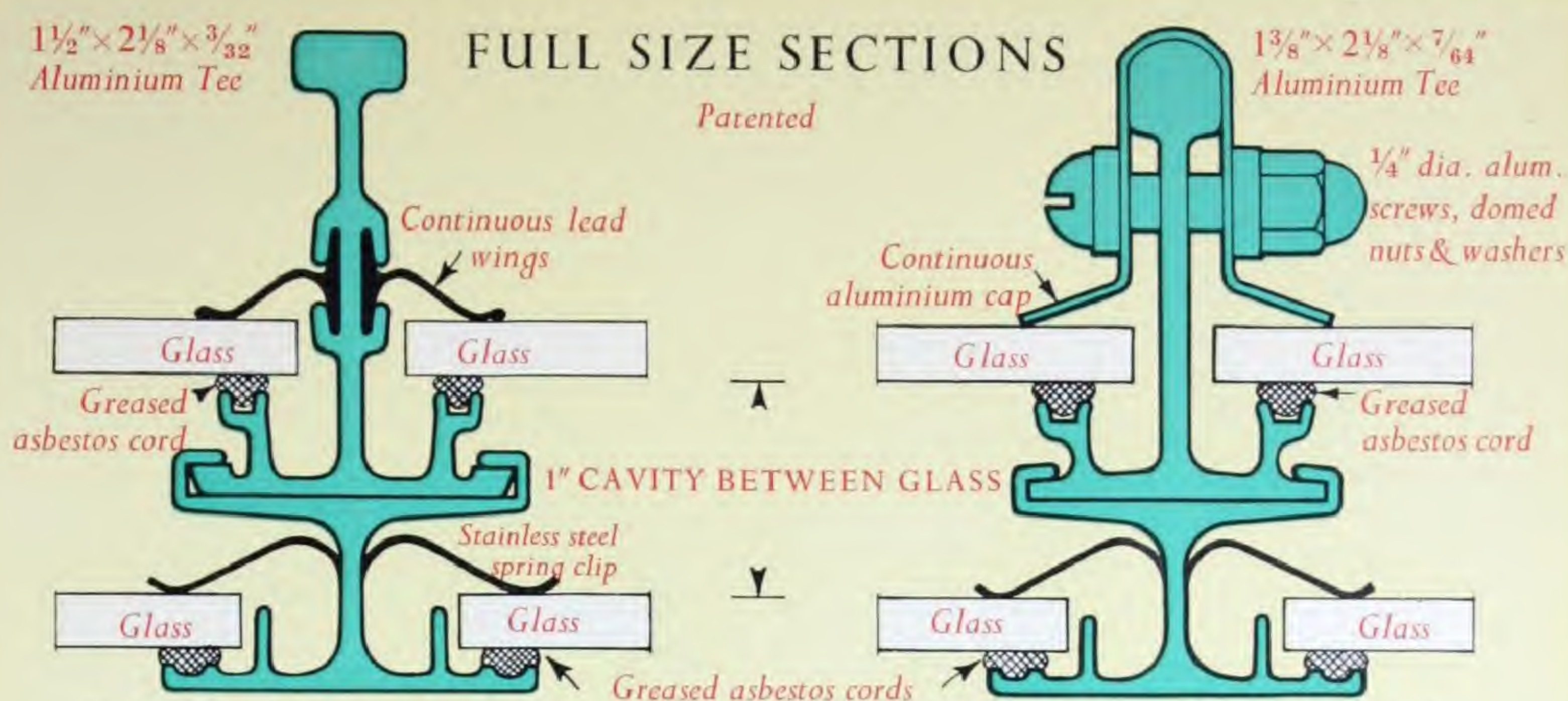
A considerable saving can be effected in the capital cost of heating equipment if our Double Patent Glazing is introduced at the design stage of a building.

We are at all times pleased to prepare schemes and drawings.

We illustrate both Lead-clothed Steel and Aluminium Double Patent Glazing: each has properties which make it more suitable than the other for certain conditions, and we usually select the type and size of double glazed bar most suited to the atmospheric and physical properties of each installation, after consultation with the customer.



# HOPE'S Aluminium Double Glazing Bars



DAL Bar for spans up to 7' 6"

DBL Bar for spans up to 9' 0"  
(1 1/2" x 2 1/2" Aluminium Tee)

DCL Bar for spans up to 10' 6"  
(1 1/2" x 3" Aluminium Tee)

DA Bar for spans up to 7' 6"

DB Bar for spans up to 9' 0"  
(1 3/8" x 2 5/8" Aluminium Tee)

For purposes of calculation, weight per foot super of the above bars including 2 sheets of 1/4" glass can be taken as 8 lb

## SPECIFICATIONS

**Lead-clothed Steel** Double Patent Glazing to consist of HOPE'S Lead-clothed Glazing Bars, constructed of a rolled steel bulb tee bar, dipped in calcium plumbate paint stoved on and totally enclosed in a jointless lead sheath hermetically sealed. The lead sheath to be formed with a ridge on the bulb, two independent wings for dressing on to the outer glass and to have condensation channels below the inner glass. The glazing bar to be of a suitable strength for the span involved.

The inner glass to be bedded on greased asbestos cords fitted into cord channels in the lead sheath, and separated from the outer glass by an aluminium channel set in a non-setting seal.

Glass to be secured at bottom of the bar by galvanized iron or non-ferrous metal shoe.

Bars to be spaced at 24 1/2" centres, fixed and glazed by HOPE'S.

**Aluminium with Lead Wings** Double Patent Glazing to consist of HOPE'S Aluminium Glazing Bars in alloy HE9WP, bar to have incorporated in it continuous extruded lead wings for dressing on to the outer glass. Glazing bar to be of suitable strength for the span involved. Both inner and outer glass to be bedded on greased asbestos cords fitted into channels in bar. Outer glass is secured at bottom of bar by an extruded aluminium glass stop fixed by means of an aluminium bolt and nut. Inner glass is retained at bottom of bar by the purlin, where it is bedded in a non-setting seal; and along the bar by stainless steel spring clips.

Bars to be spaced at 24 1/2" centres, fixed and glazed by HOPE'S.

**Aluminium with Aluminium Capping** Double Patent Glazing to consist of HOPE'S Extruded Aluminium Glazing Bars in alloy HE9WP, fitted with a continuous aluminium capping of 21 gauge commercially pure aluminium. The capping to be secured to the bar by means of aluminium screws and domed nuts. Glazing bar to be of suitable strength for the span involved. Both inner and outer glass to be bedded on greased asbestos cords fitted into channels in bar. Outer glass is secured at bottom of bar by an extruded aluminium glass stop fixed by means of an aluminium bolt and nut. Inner glass is retained at bottom of bar by the purlin, where it is bedded in a non-setting seal; and along the bar by stainless steel spring clips.

Bars to be spaced at 24 3/8" centres, fixed and glazed by HOPE'S.



# MINIMUM CLEARANCES

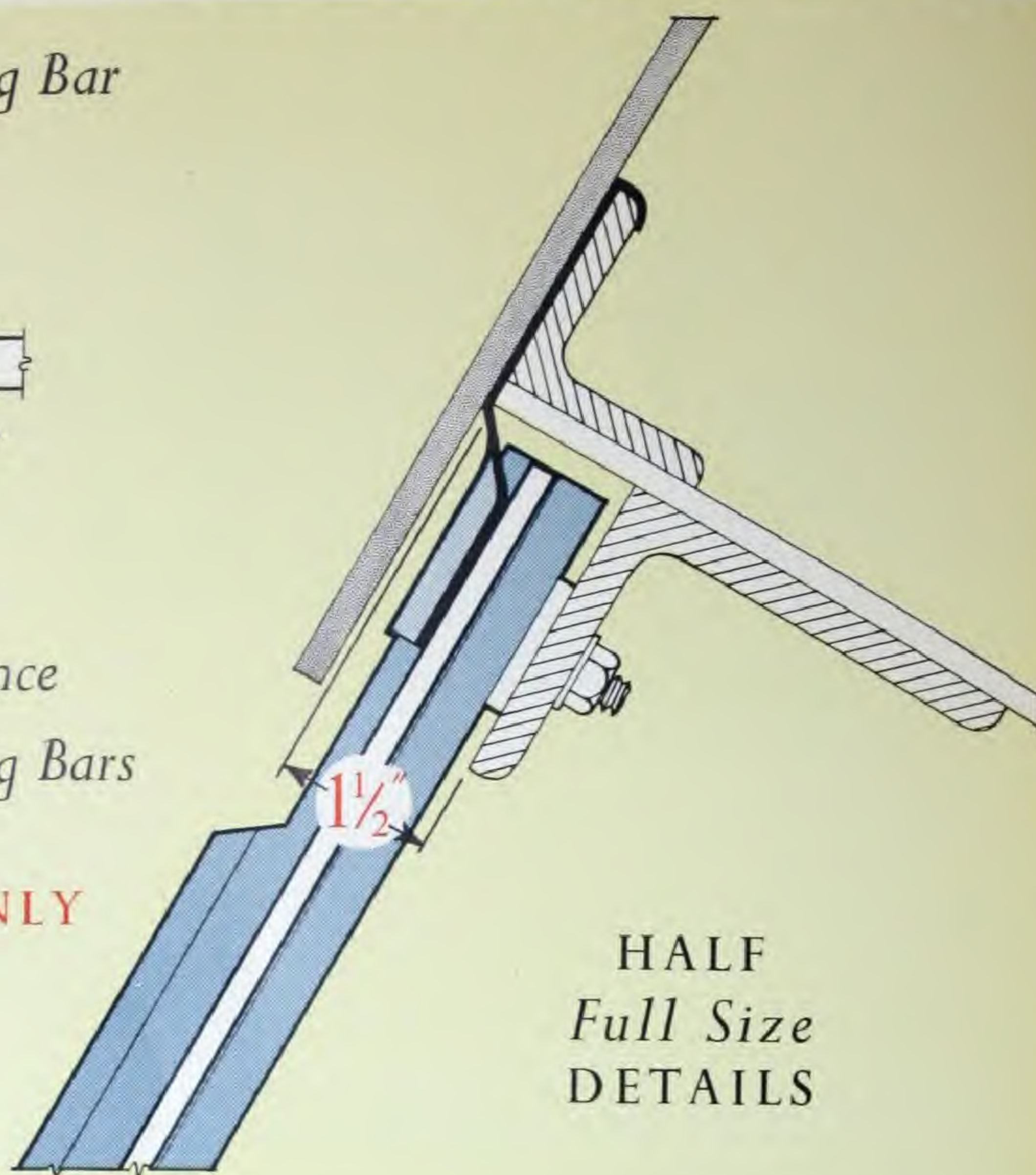
## HOPE'S B1 Glazing Bar



*Full Size Section*

*1½" minimum clearance  
for B1 and O3 Glazing Bars*

**TOP PURLINS ONLY**



HALF  
*Full Size*  
DETAILS

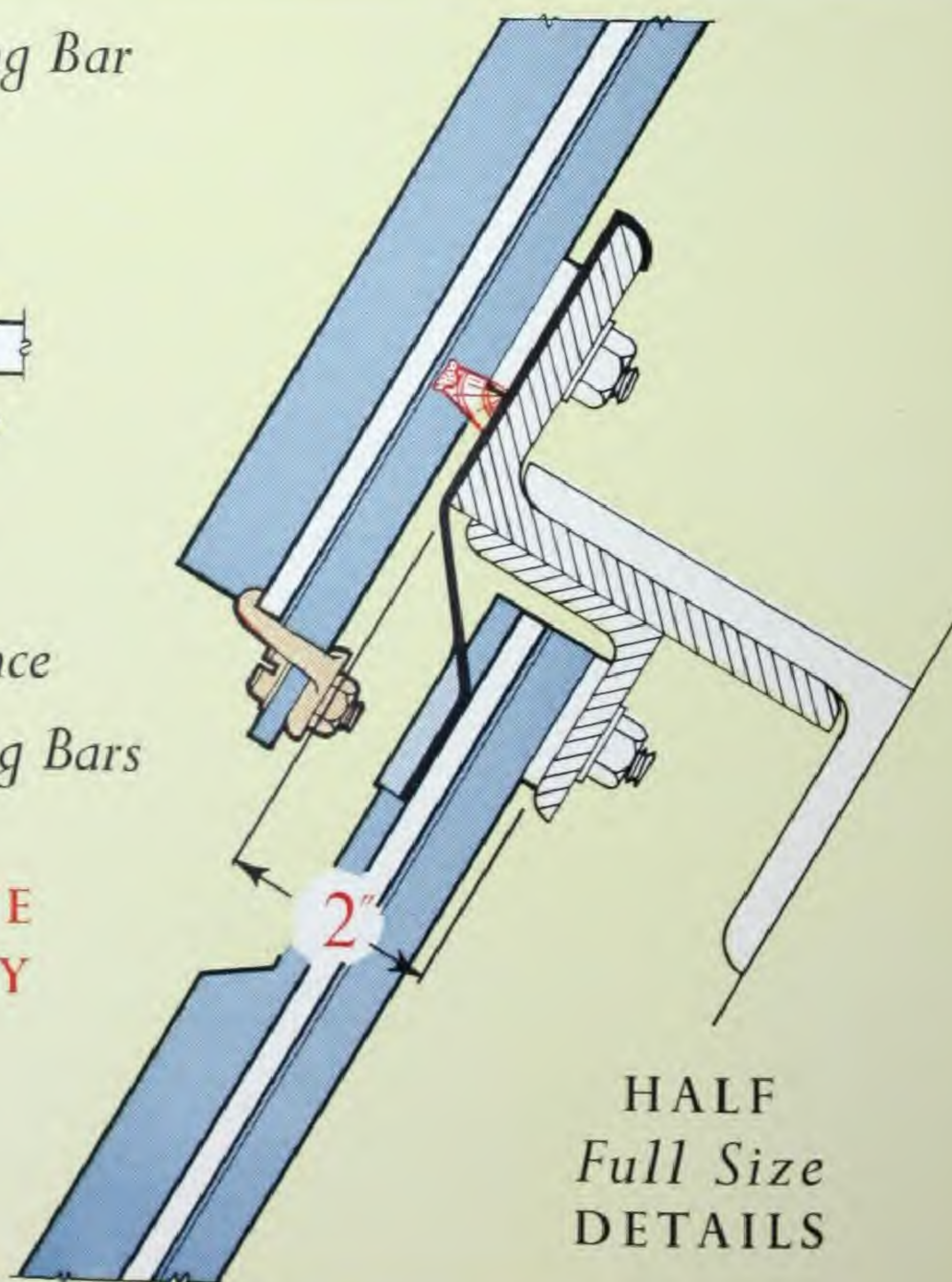
## HOPE'S B1 Glazing Bar



*Full Size Section*

*2" minimum clearance  
for B1 and O3 Glazing Bars*

**INTERMEDIATE  
PURLINS ONLY**

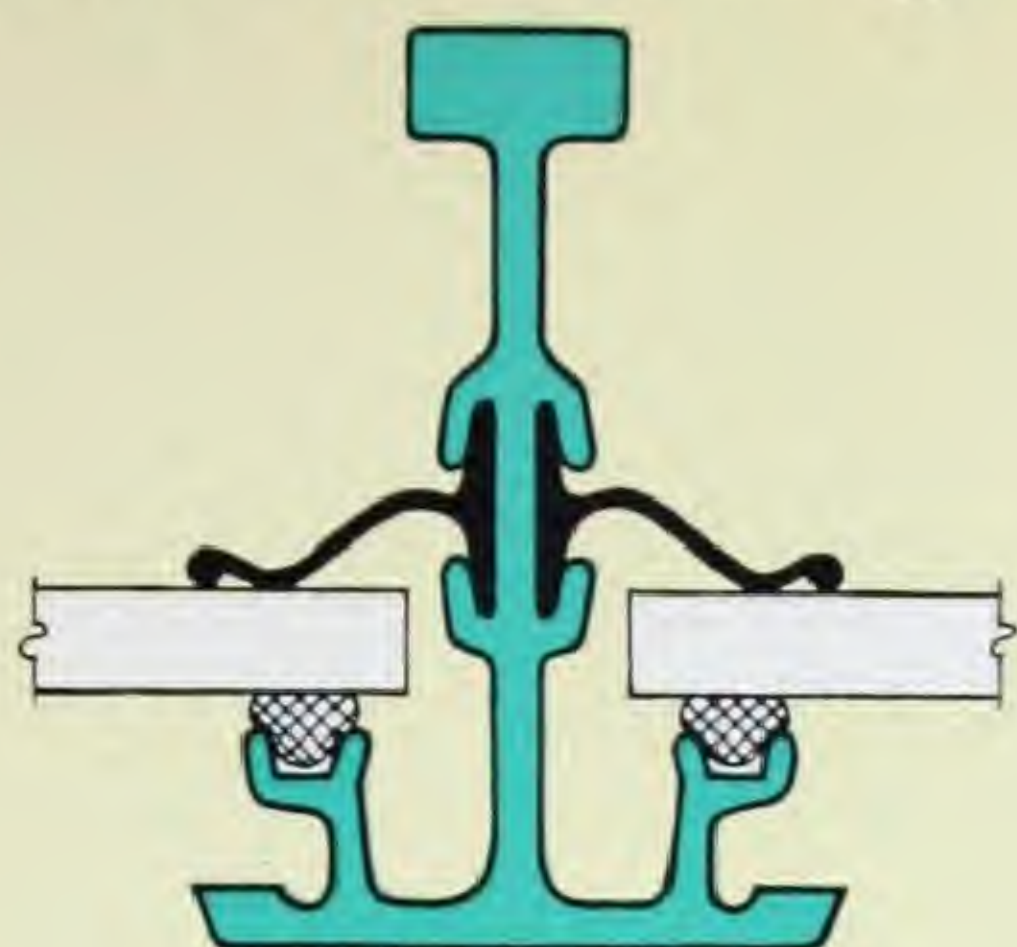


HALF  
*Full Size*  
DETAILS



# necessary for fixing glazing to steelwork

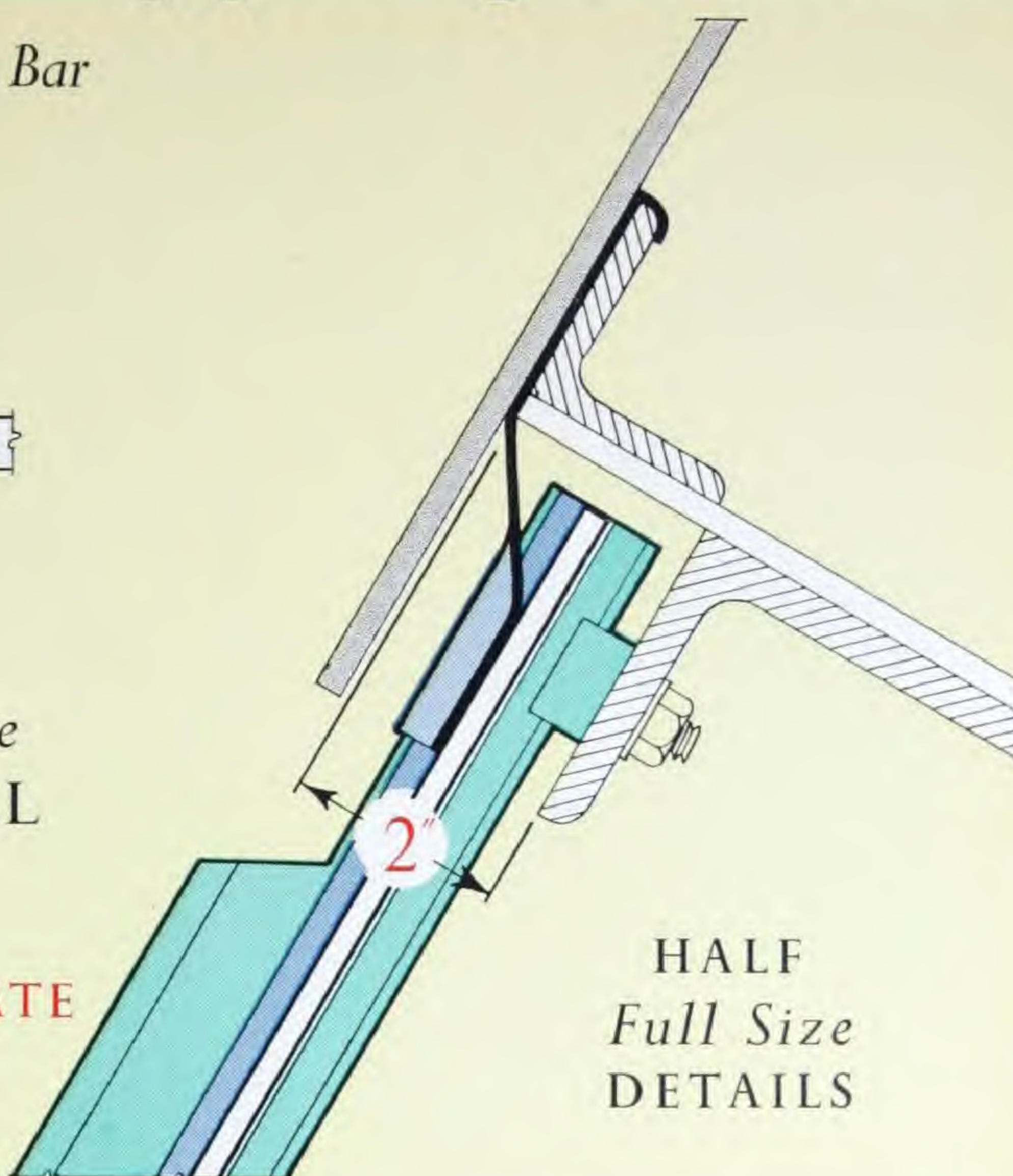
## HOPE'S AL Glazing Bar



Full Size Section

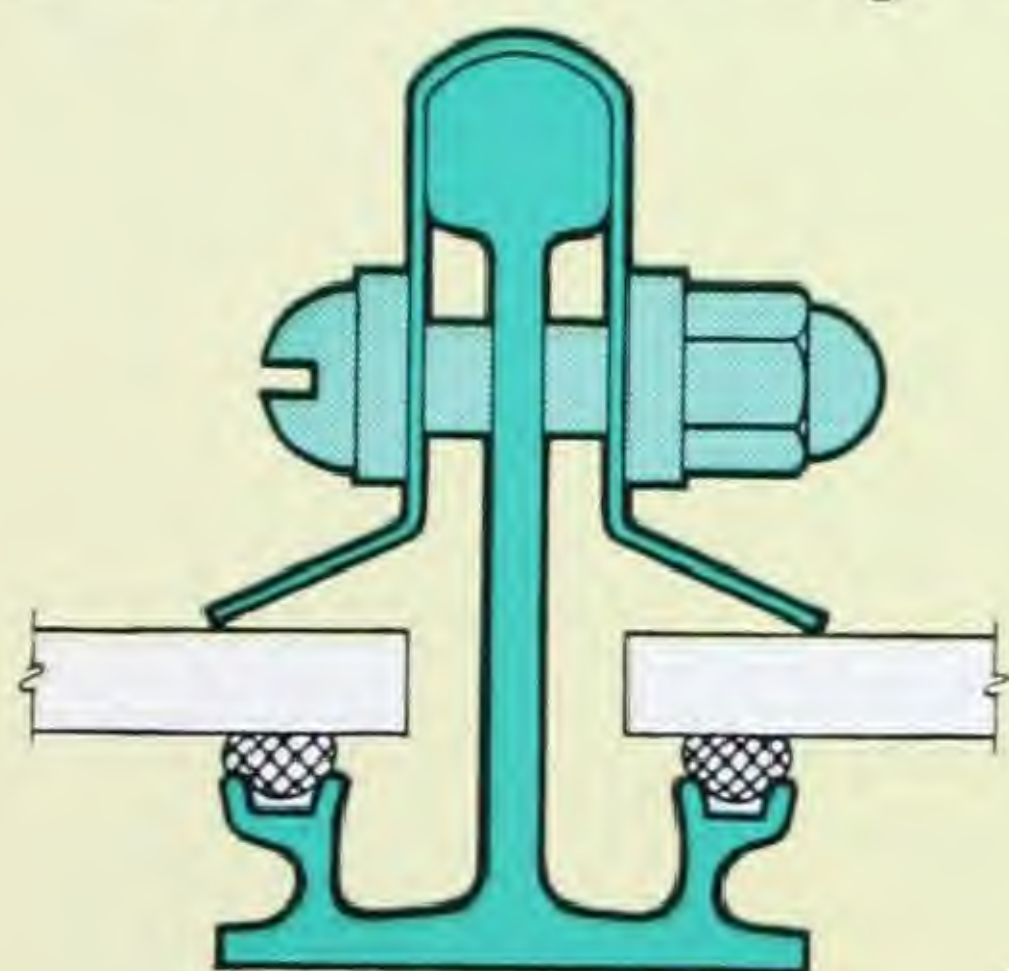
2" minimum clearance  
for DL:AL:BL:CL  
Glazing Bars

TOP & INTERMEDIATE  
PURLINS



HALF  
Full Size  
DETAILS

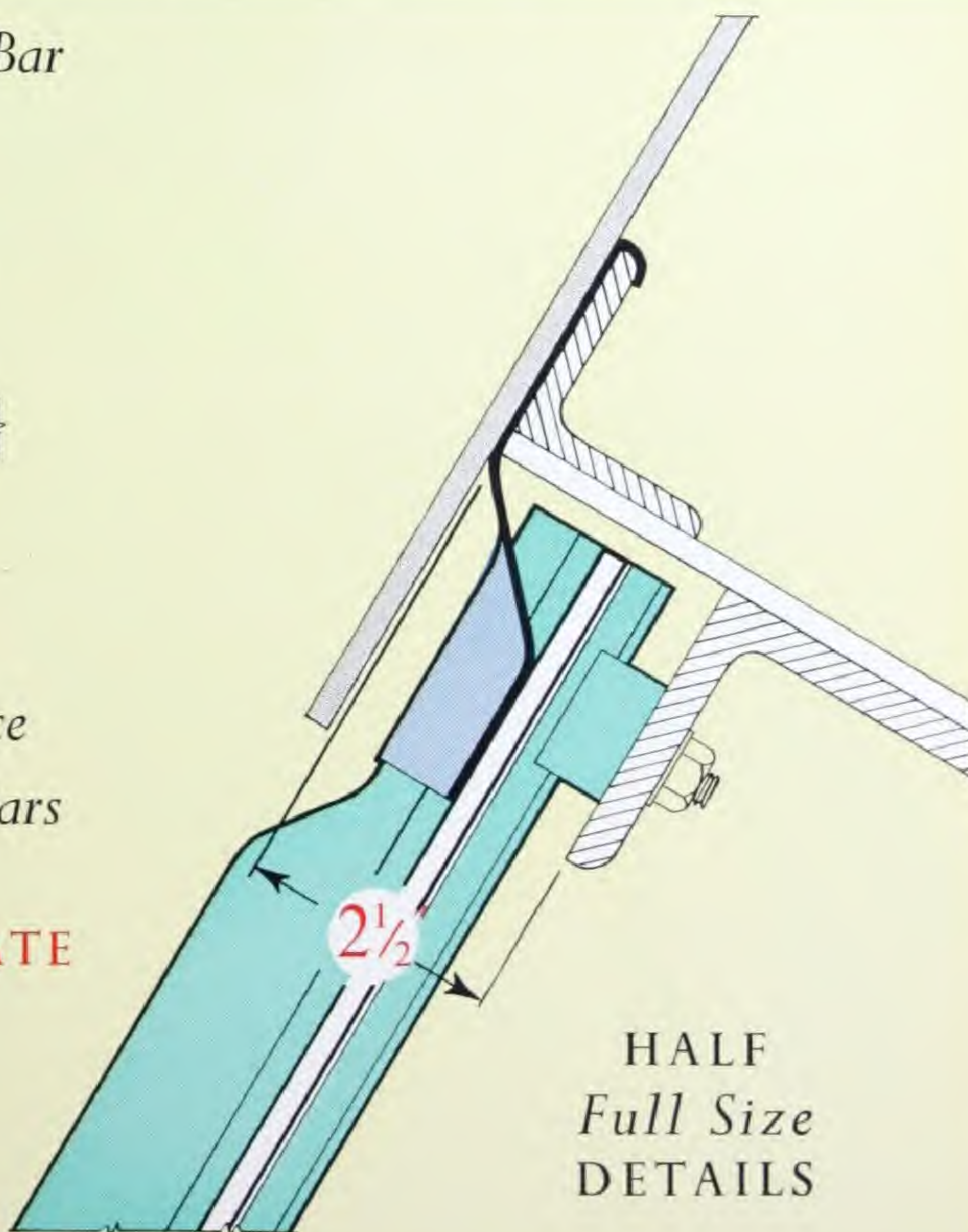
## HOPE'S A Glazing Bar



Full Size Section

2½" minimum clearance  
for A and B Glazing Bars

TOP & INTERMEDIATE  
PURLINS



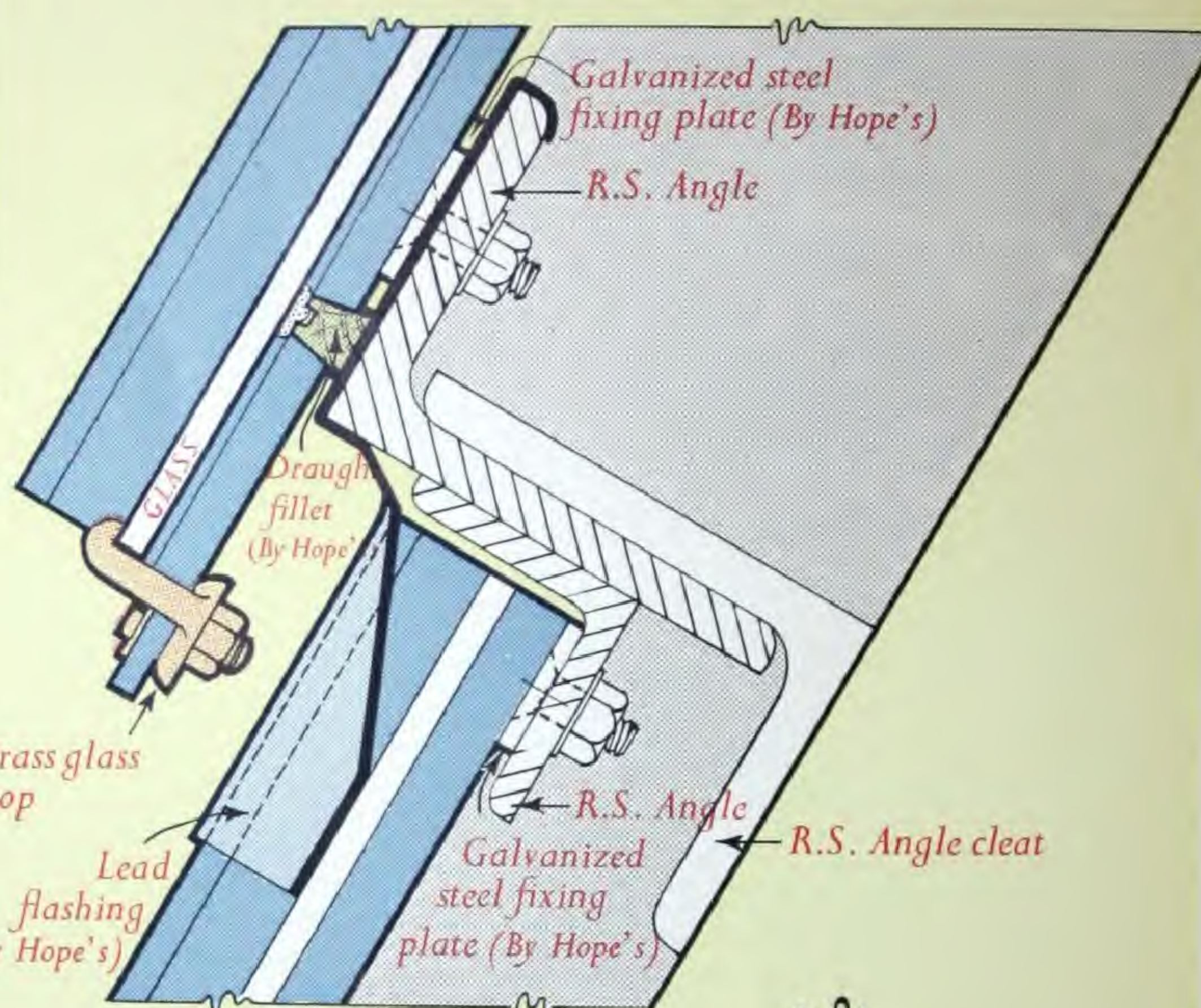
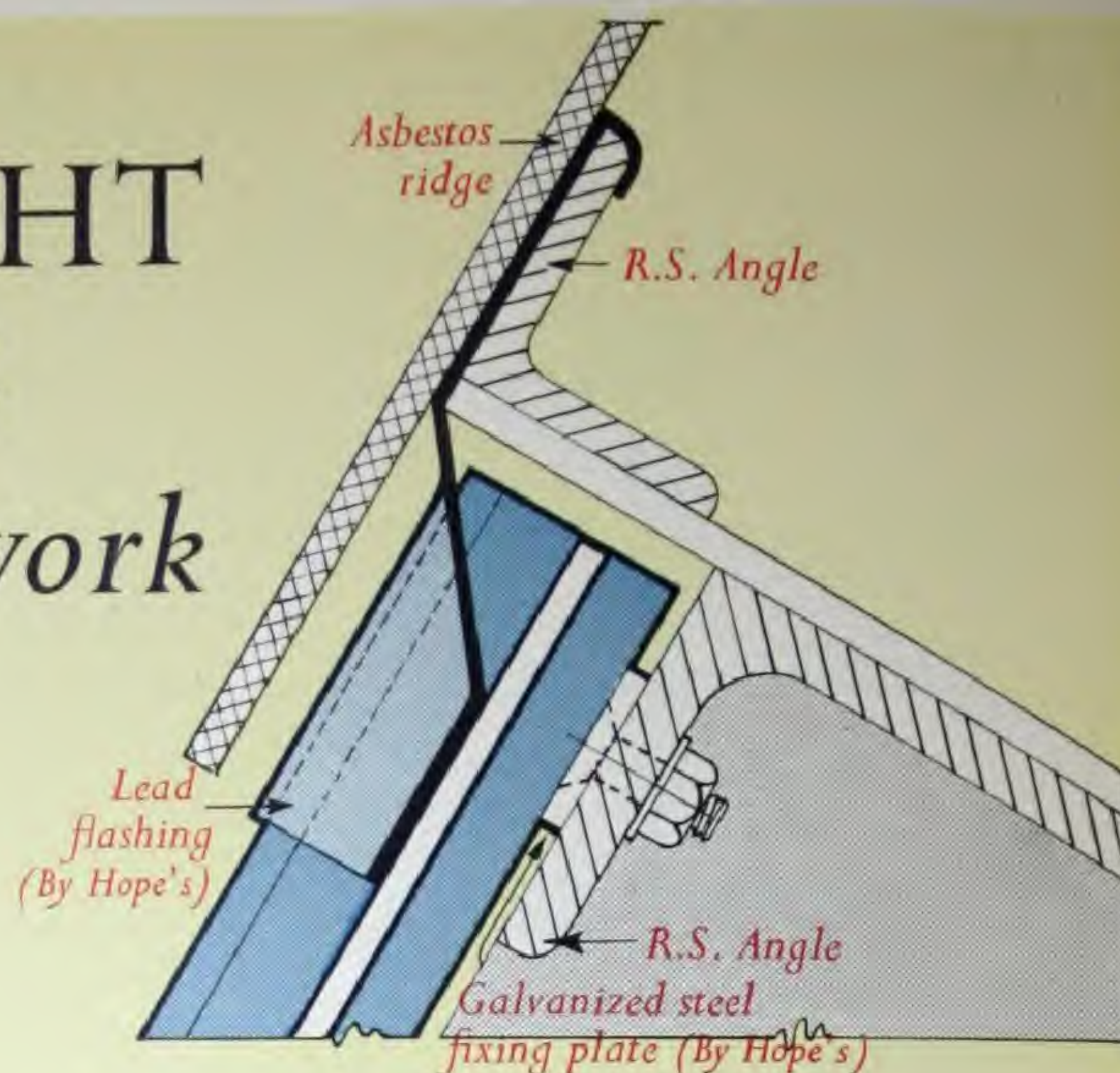
HALF  
Full Size  
DETAILS



# NORTH LIGHT GLAZING *Applied to Steelwork*

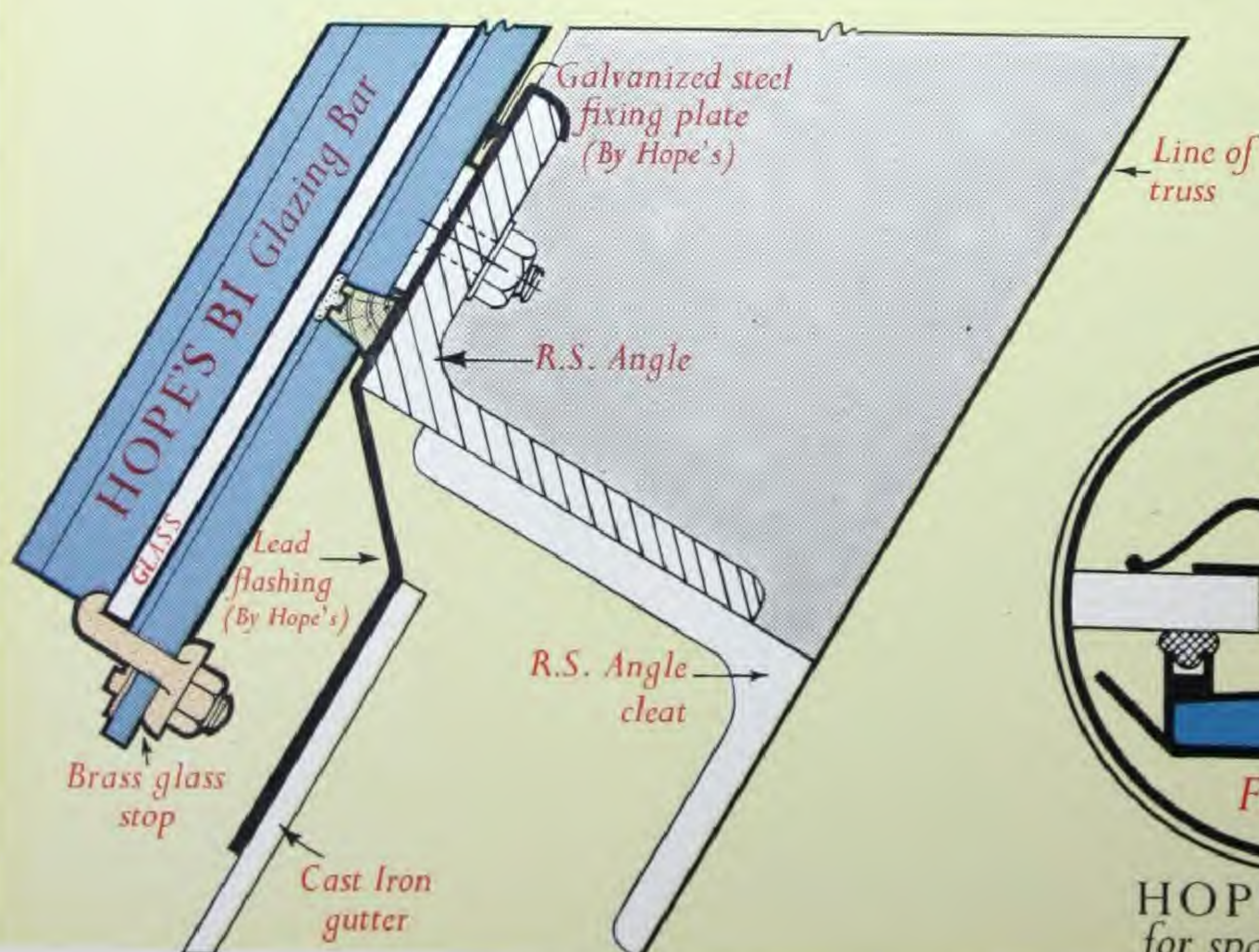


BIRLEC LTD, Aldridge  
Peter Hing & Jones, Chartered Architects



## Details HALF FULL SIZE

SEE PAGE 7 FOR STEELWORK DRILLING  
POSITIONS



HOPE'S B1 Bar  
for spans up to 7' 6"

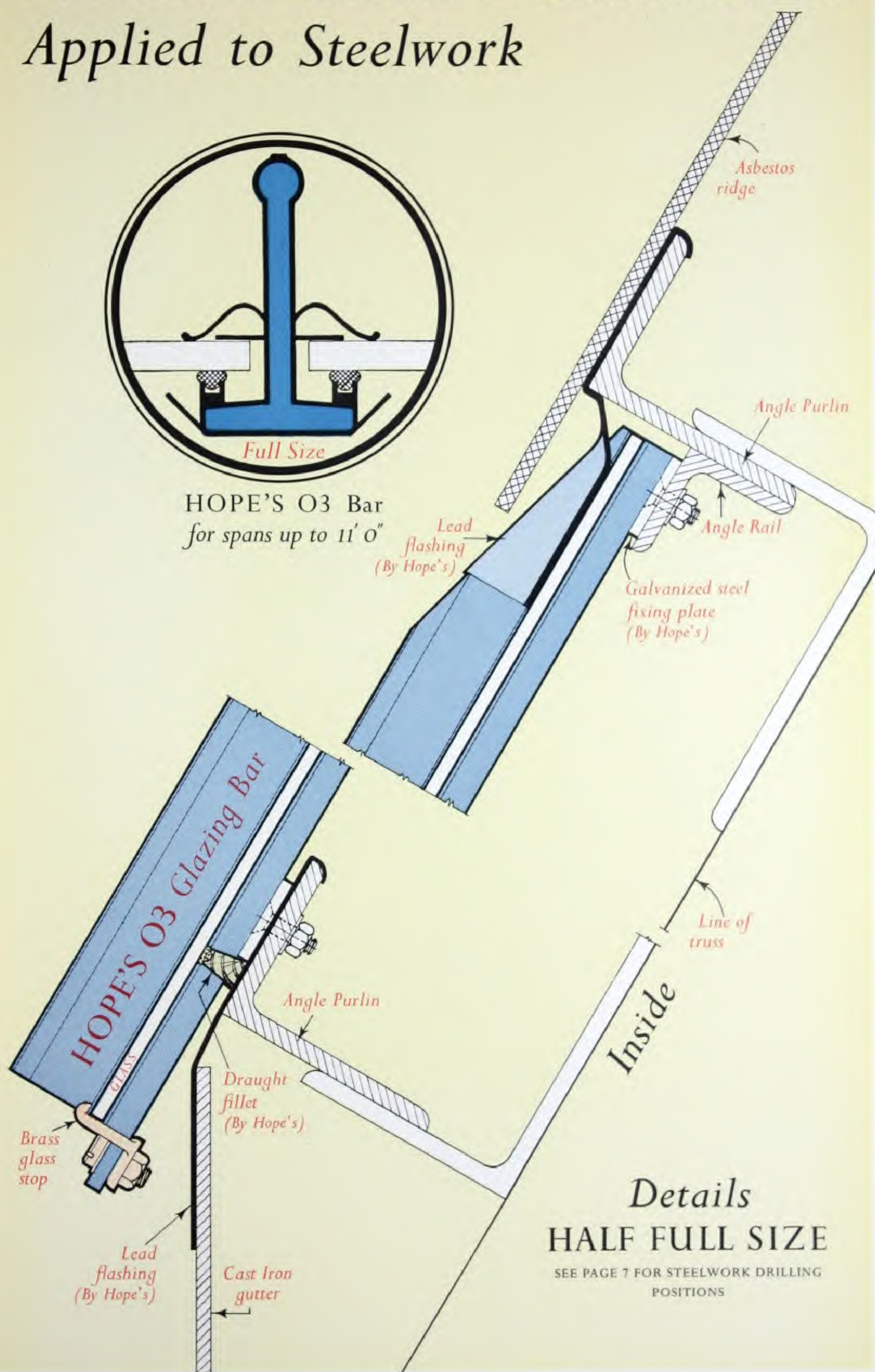


# NORTH LIGHT GLAZING

## *Applied to Steelwork*



HOPE'S O3 Bar  
for spans up to 11' 0"



Details  
HALF FULL SIZE

SEE PAGE 7 FOR STEELWORK DRILLING  
POSITIONS

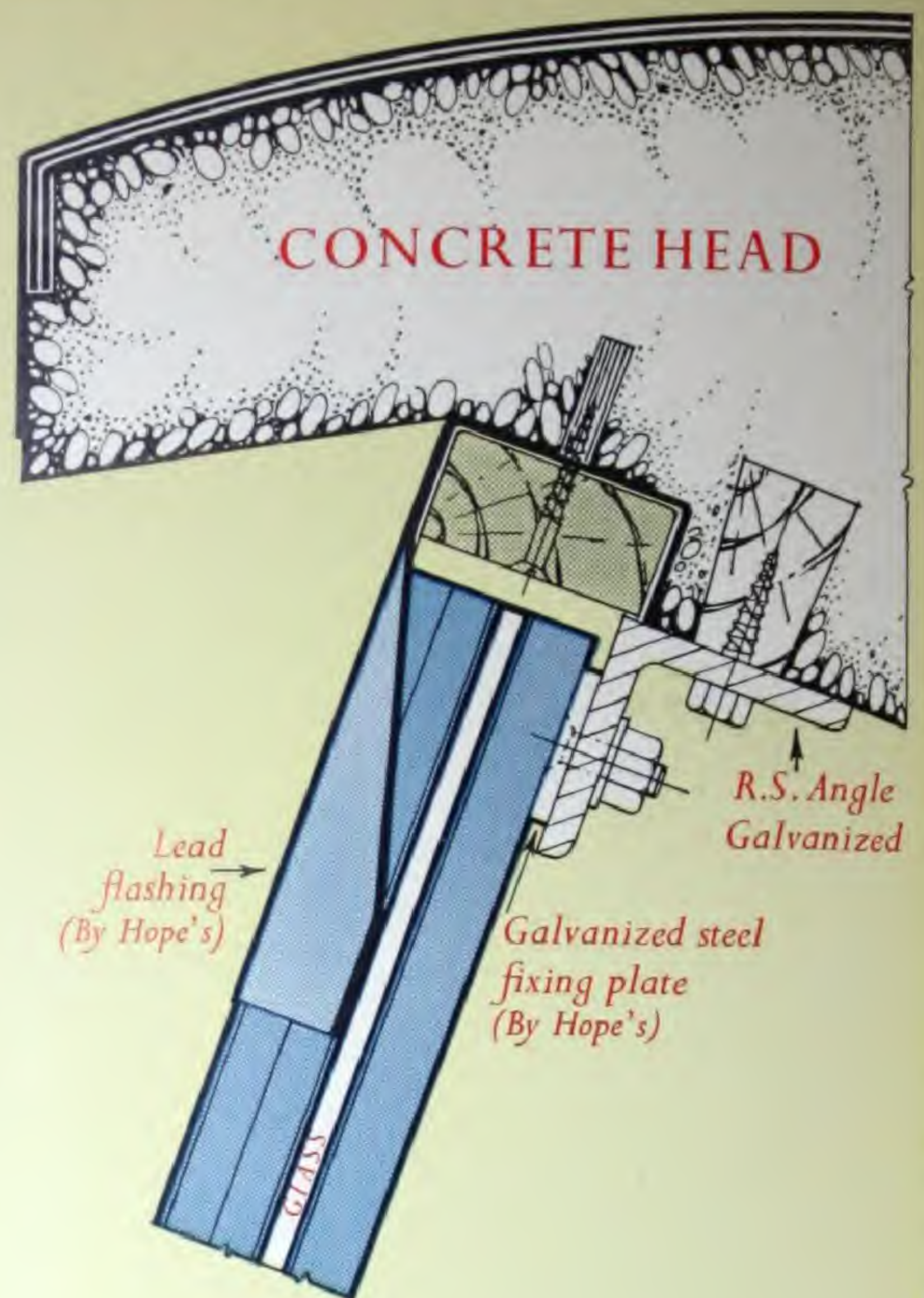


# NORTH LIGHT Concrete Construction



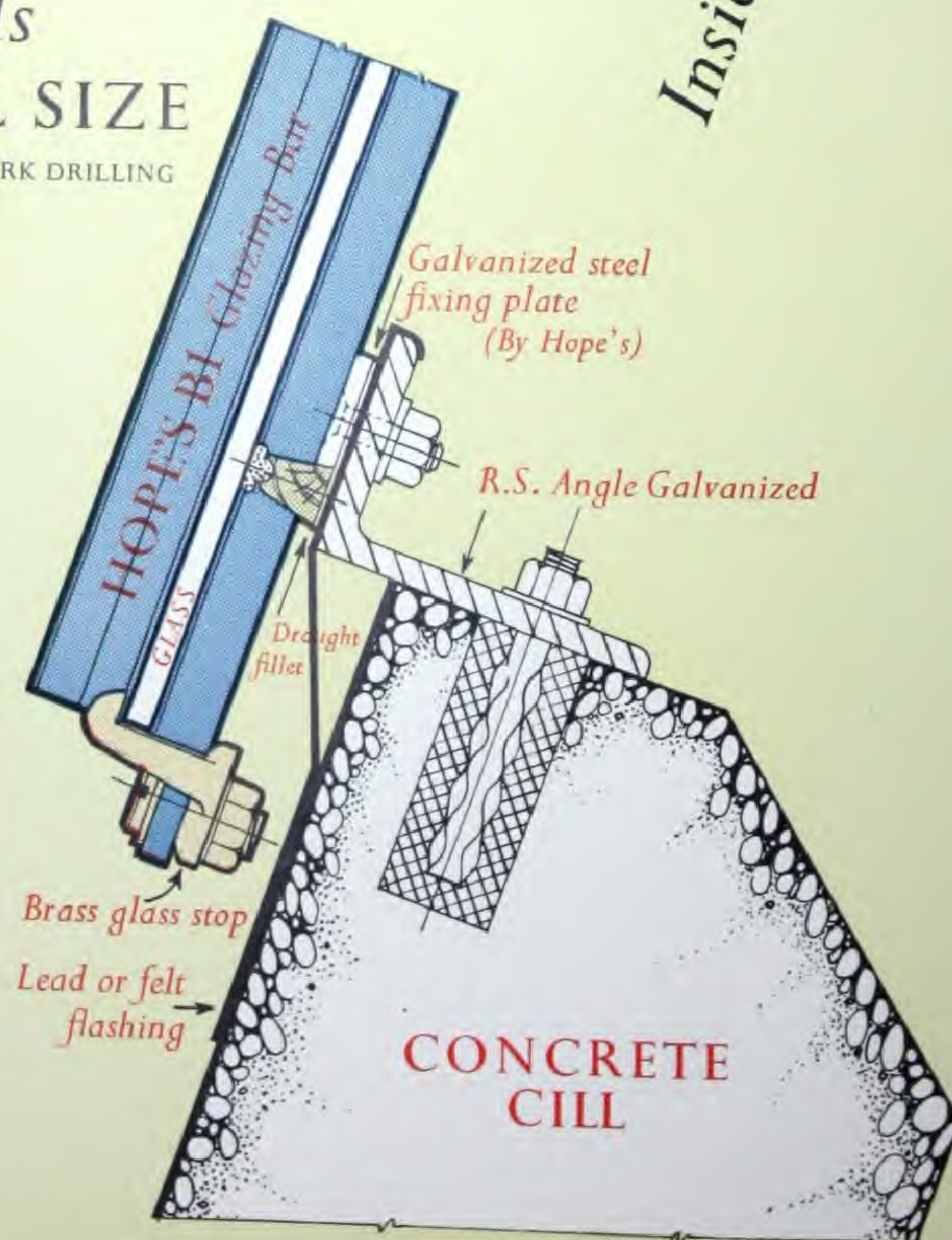
Full Size

HOPE'S B1 Bar  
for spans up to 7' 6"



## Details HALF FULL SIZE

SEE PAGE 7 FOR STEELWORK DRILLING  
POSITIONS

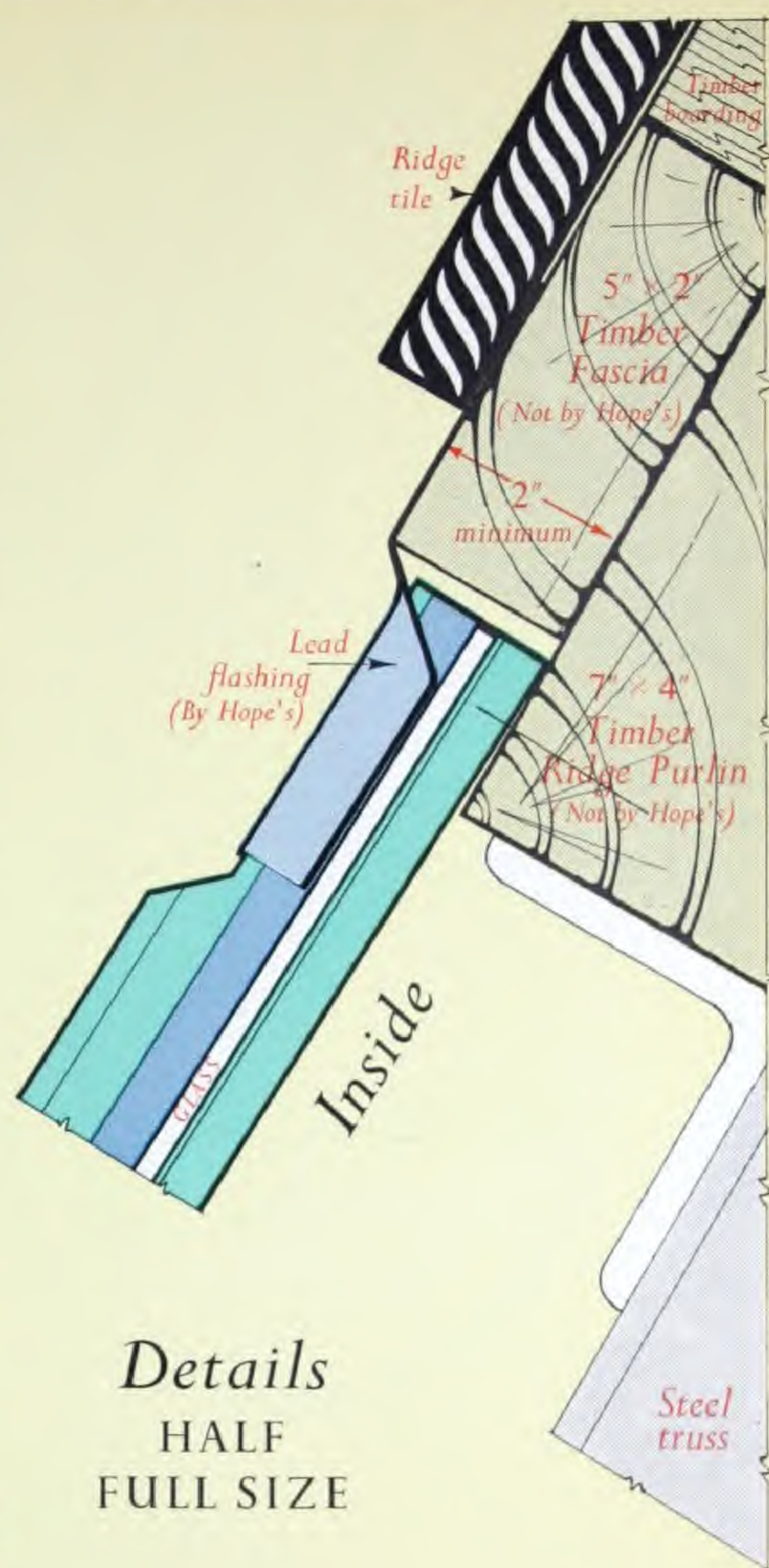




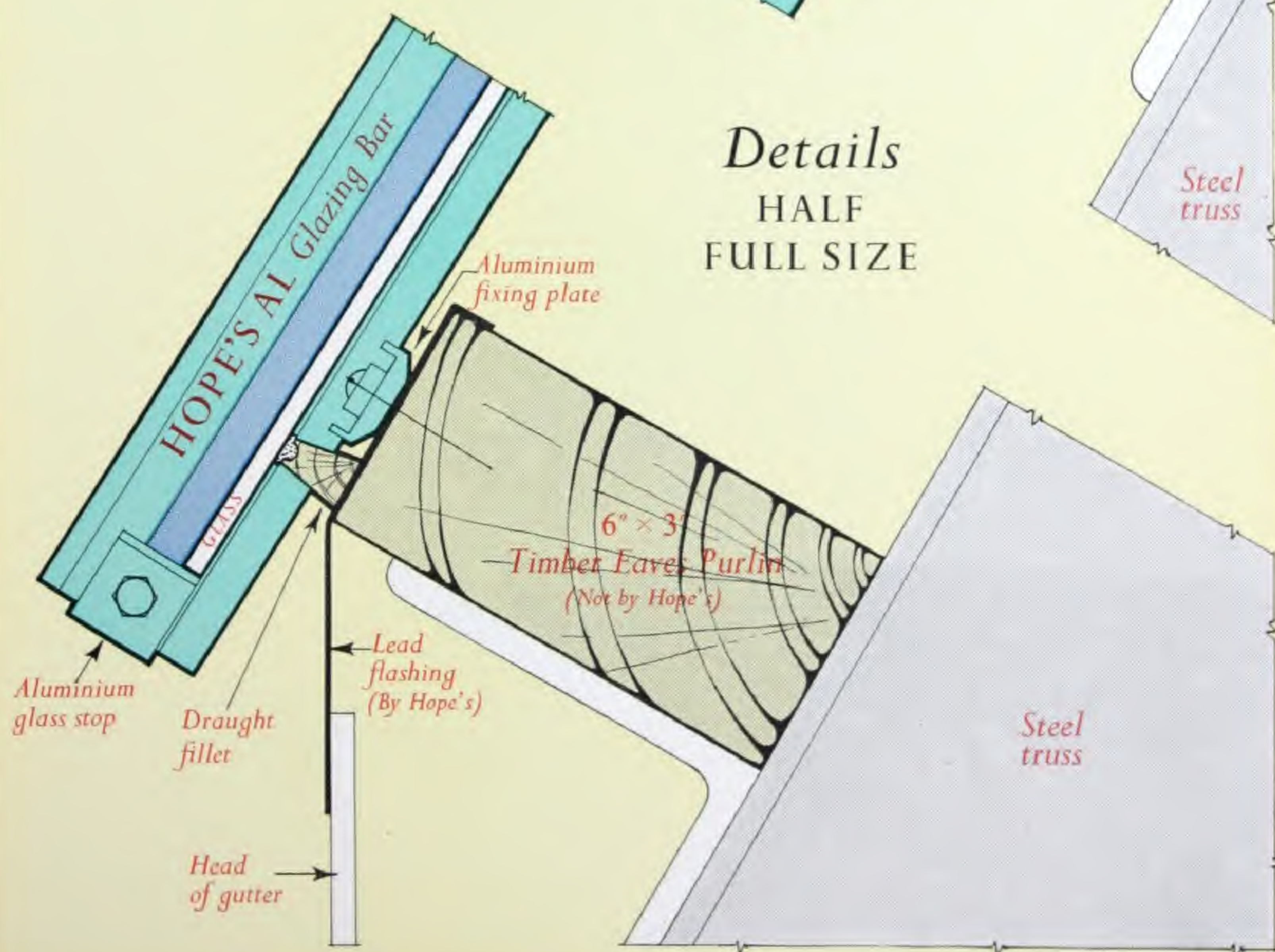
# NORTH LIGHT *Wood Construction*



The Contactor Switch Gear Ltd, Leominster  
John P. Osborne & Son, Architect



## Details HALF FULL SIZE





# SPAN ROOF PATENT GLAZING Steel Construction



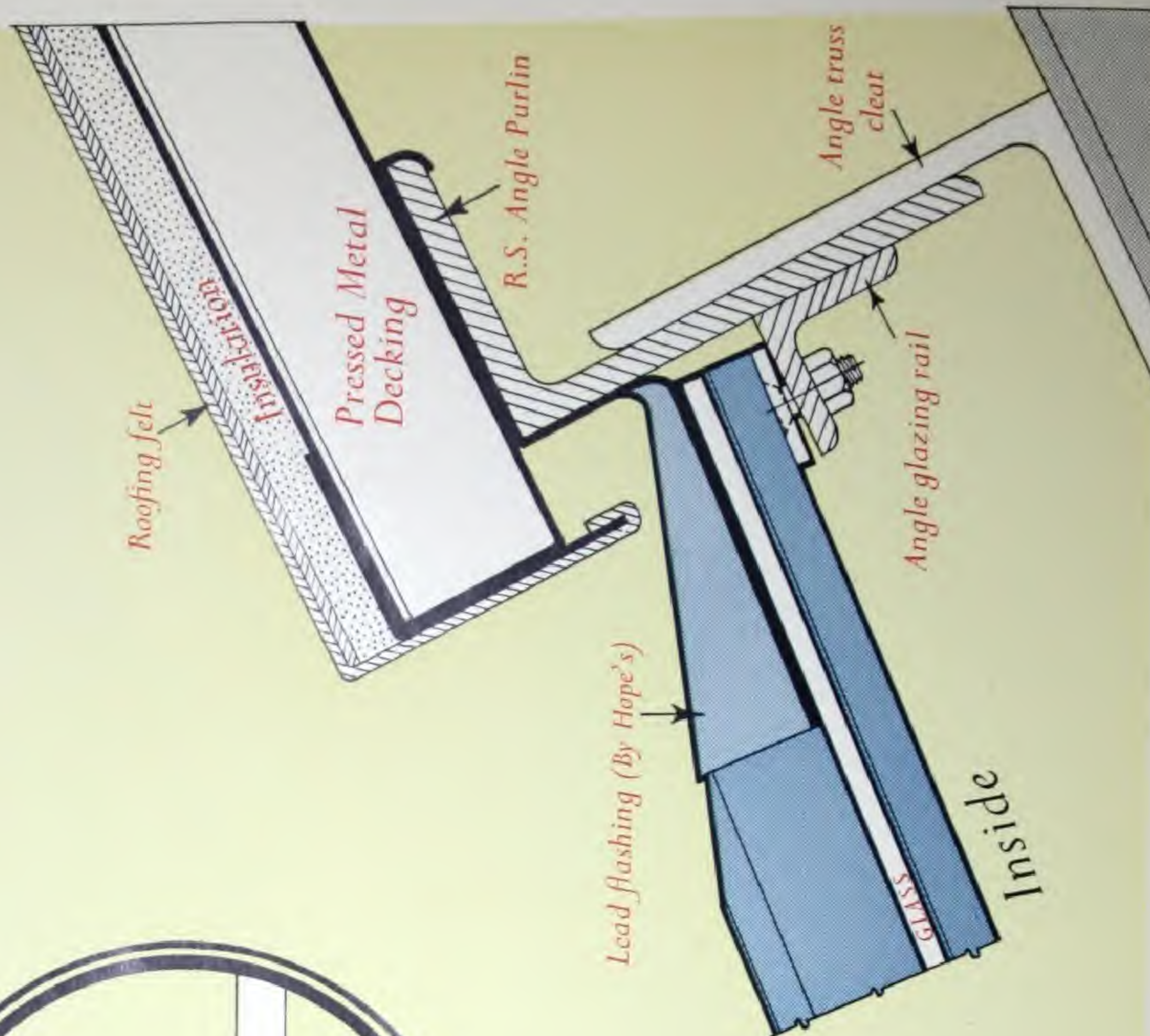
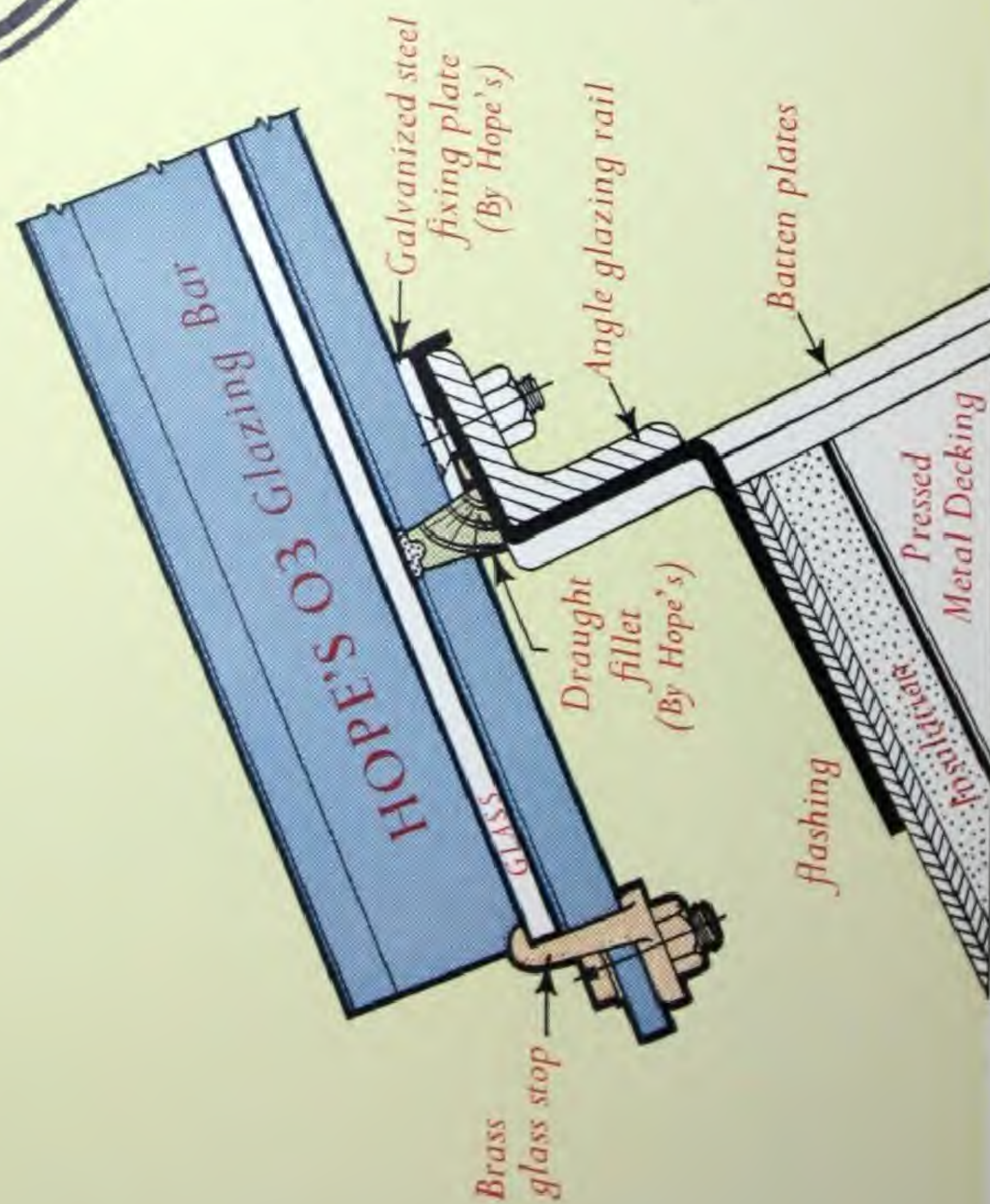
HOPE'S O3 Bar  
for spans up to 11' 0"

Details

HALF

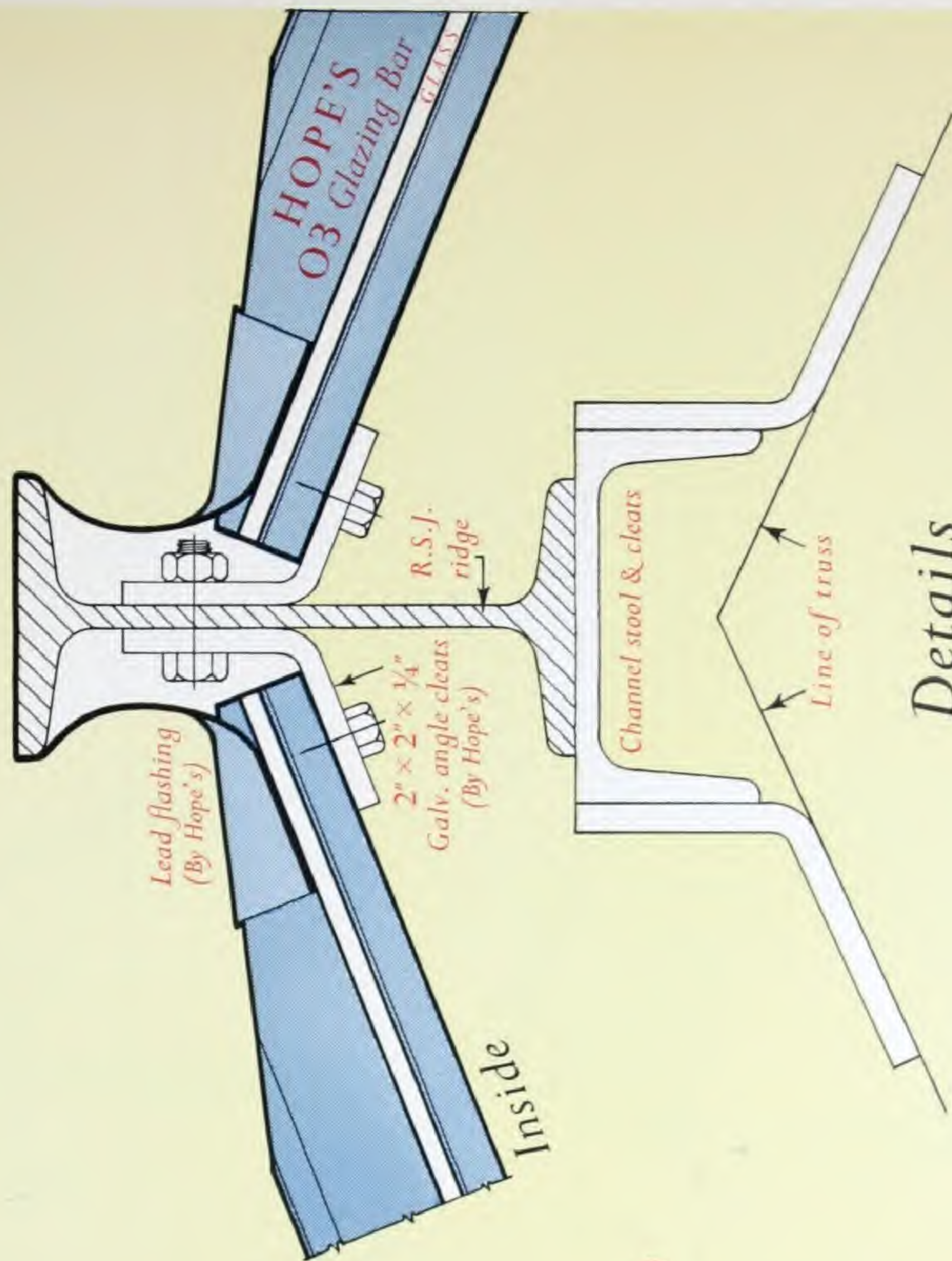
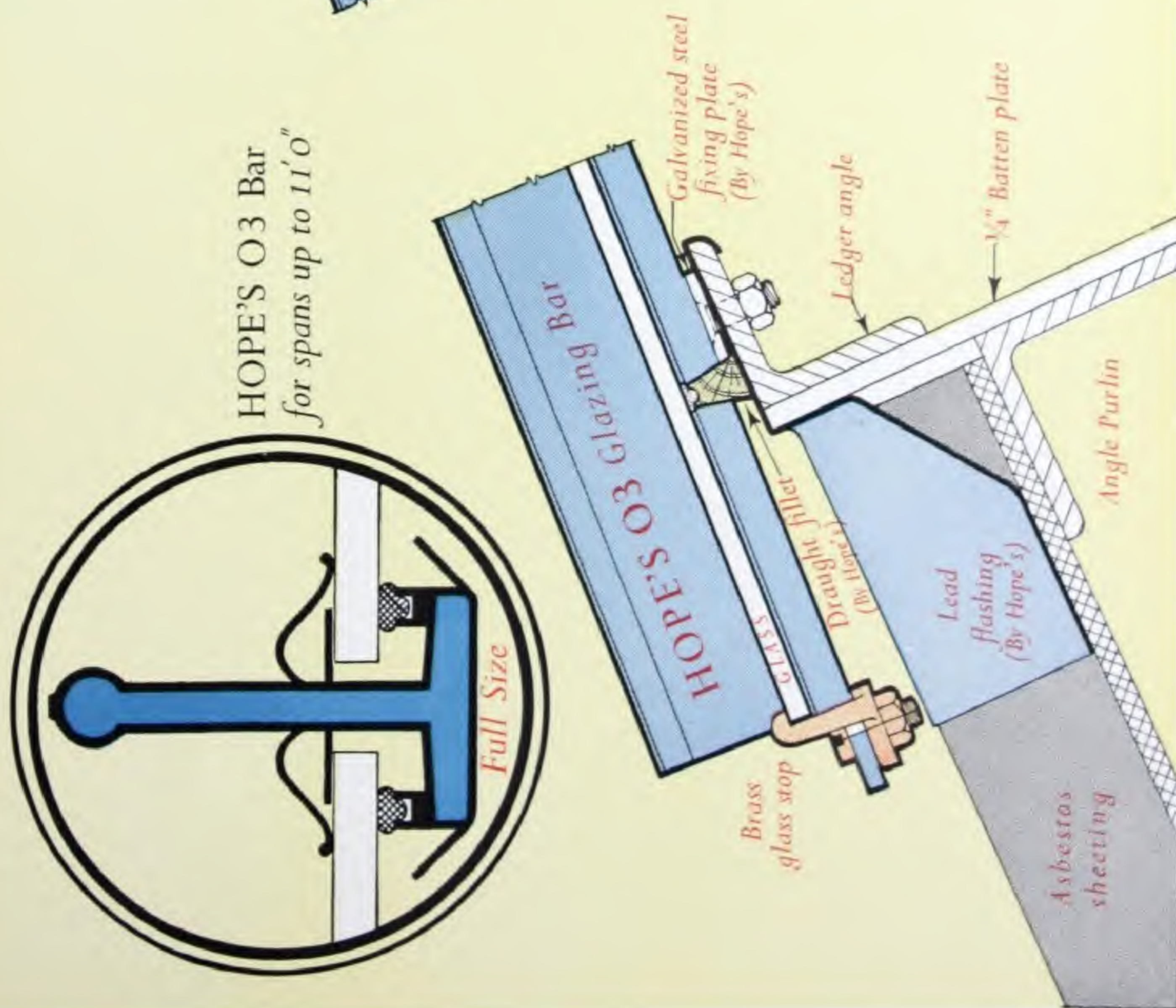
FULL SIZE

SEE PAGE 7 FOR STEELWORK  
DRILLING POSITIONS





# SPAN ROOF PATENT GLAZING Steel Construction



Details

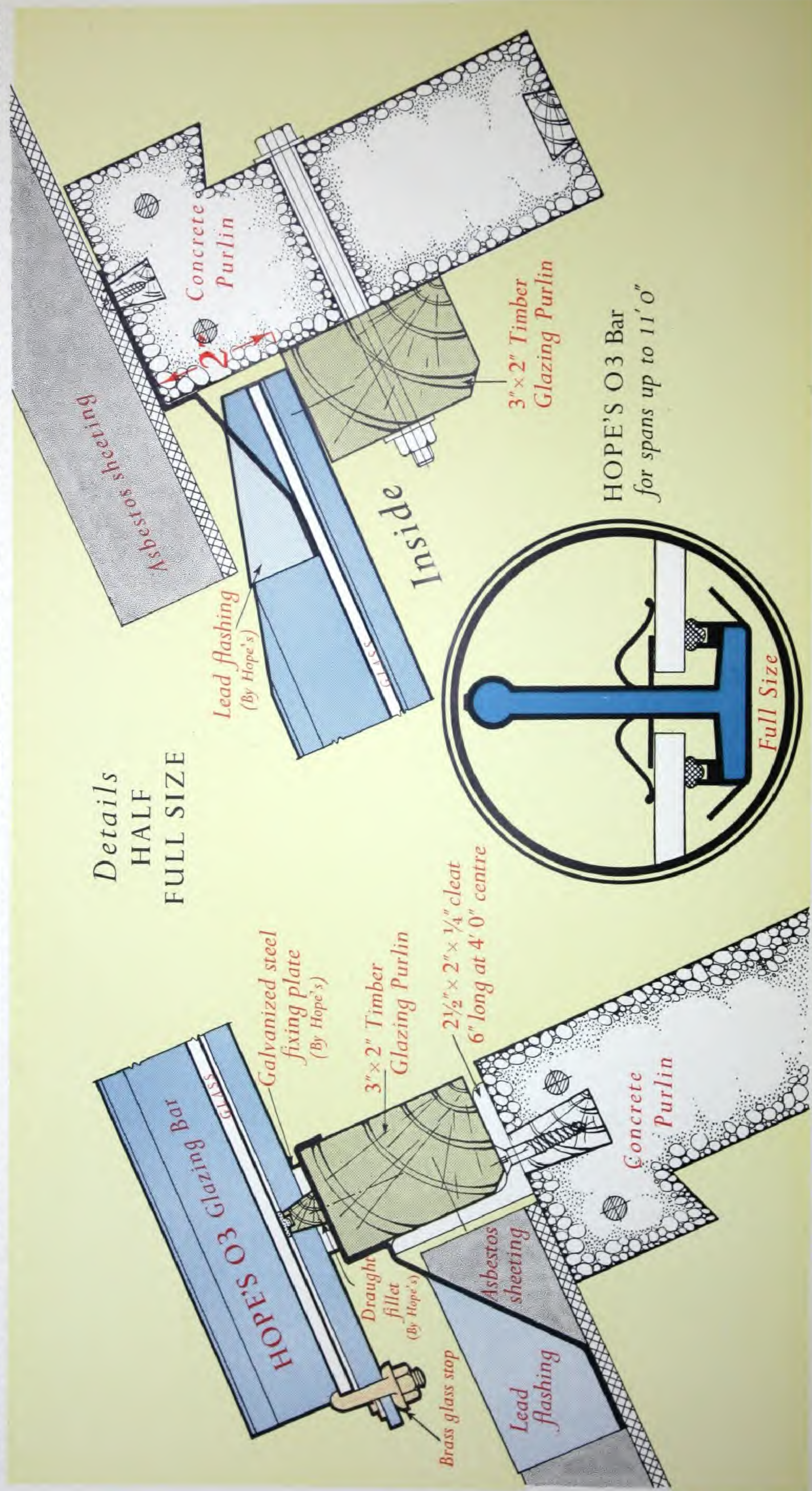
HALF

FULL SIZE

SEE PAGE 7 FOR STEELWORK  
DRILLING POSITIONS



# SPAN ROOF PATENT GLAZING Concrete Construction

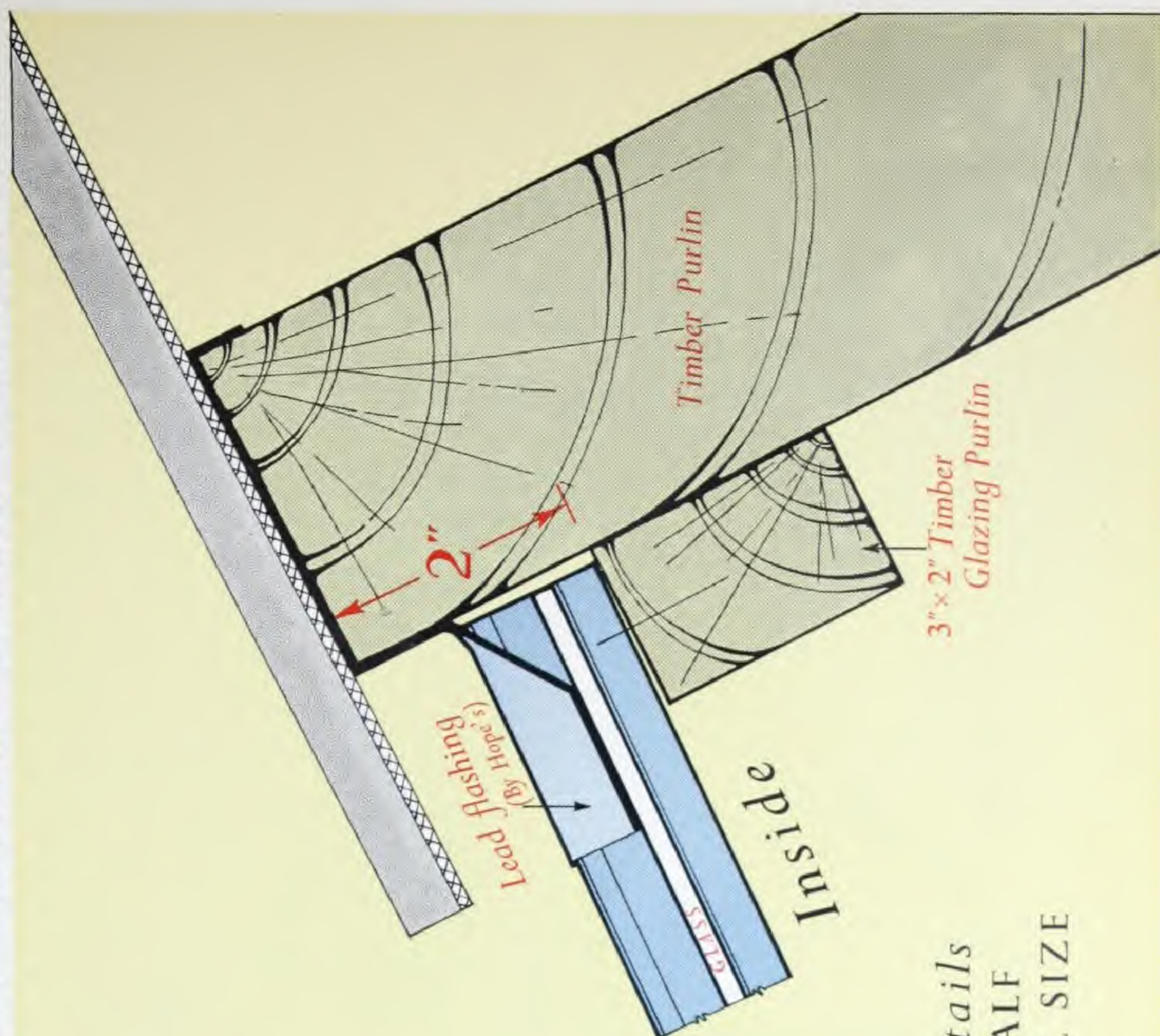
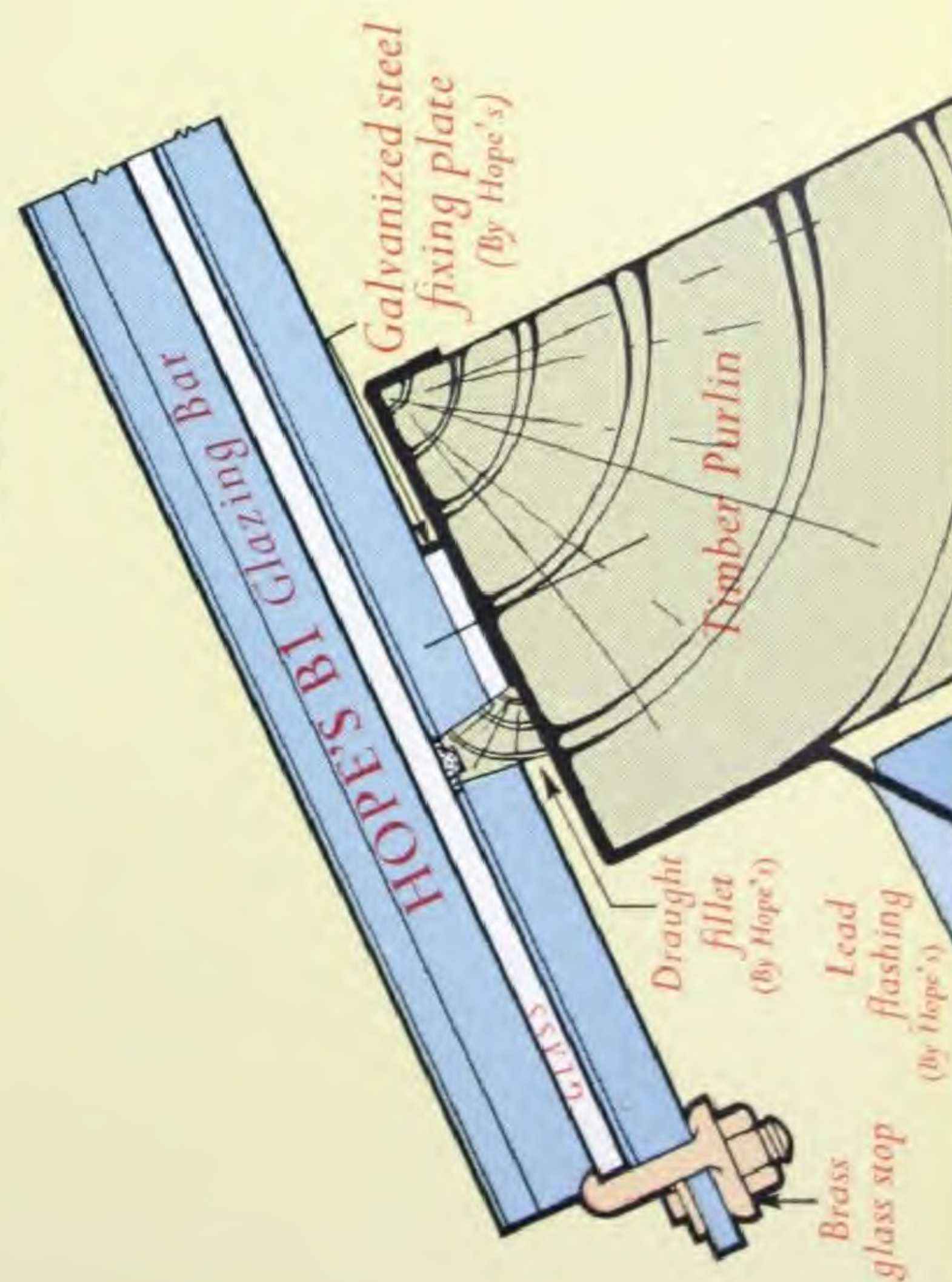




# SPAN ROOF PATENT GLAZING Wood Construction



HOPE'S B1 Bar  
for spans up to 7' 6"

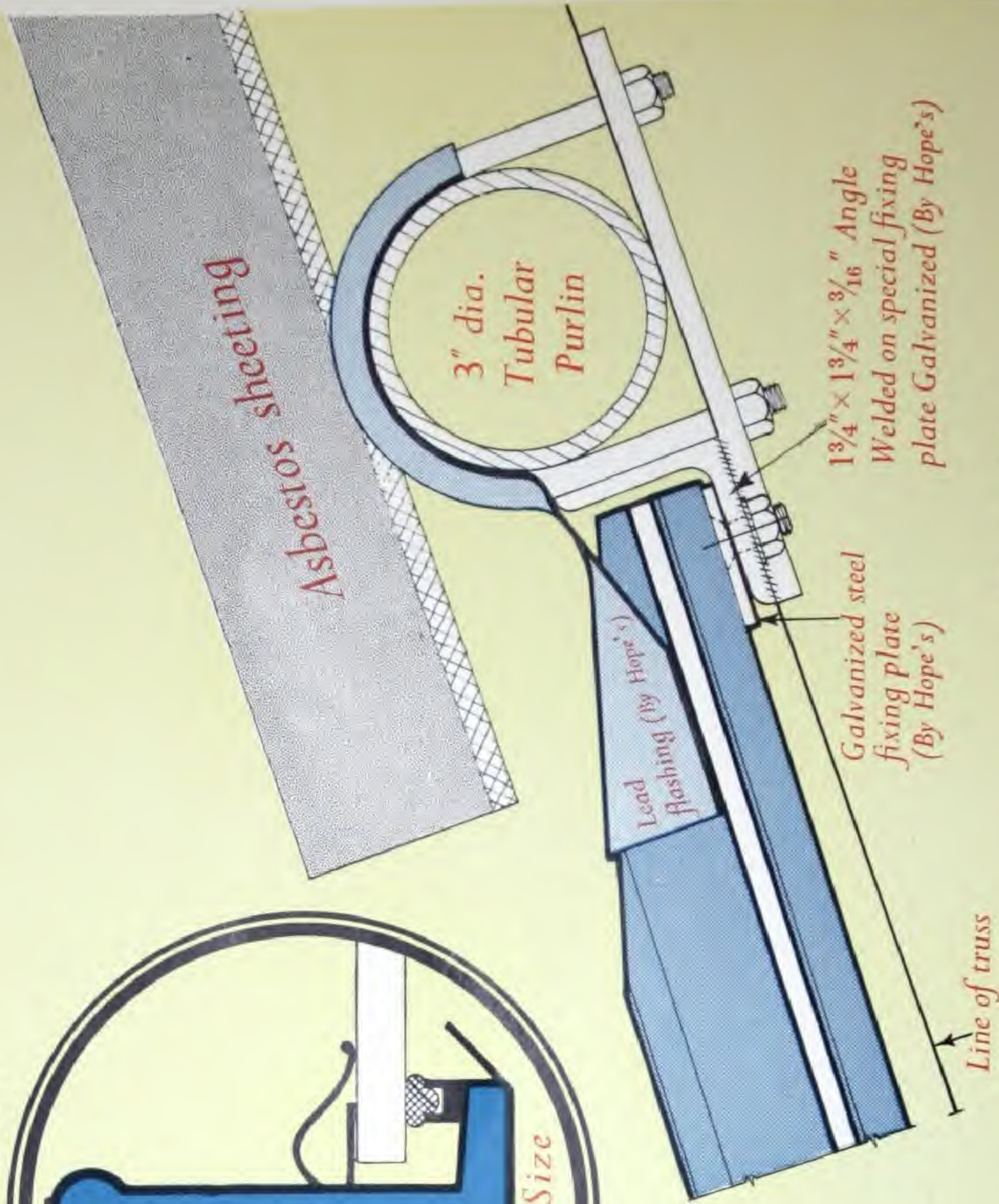
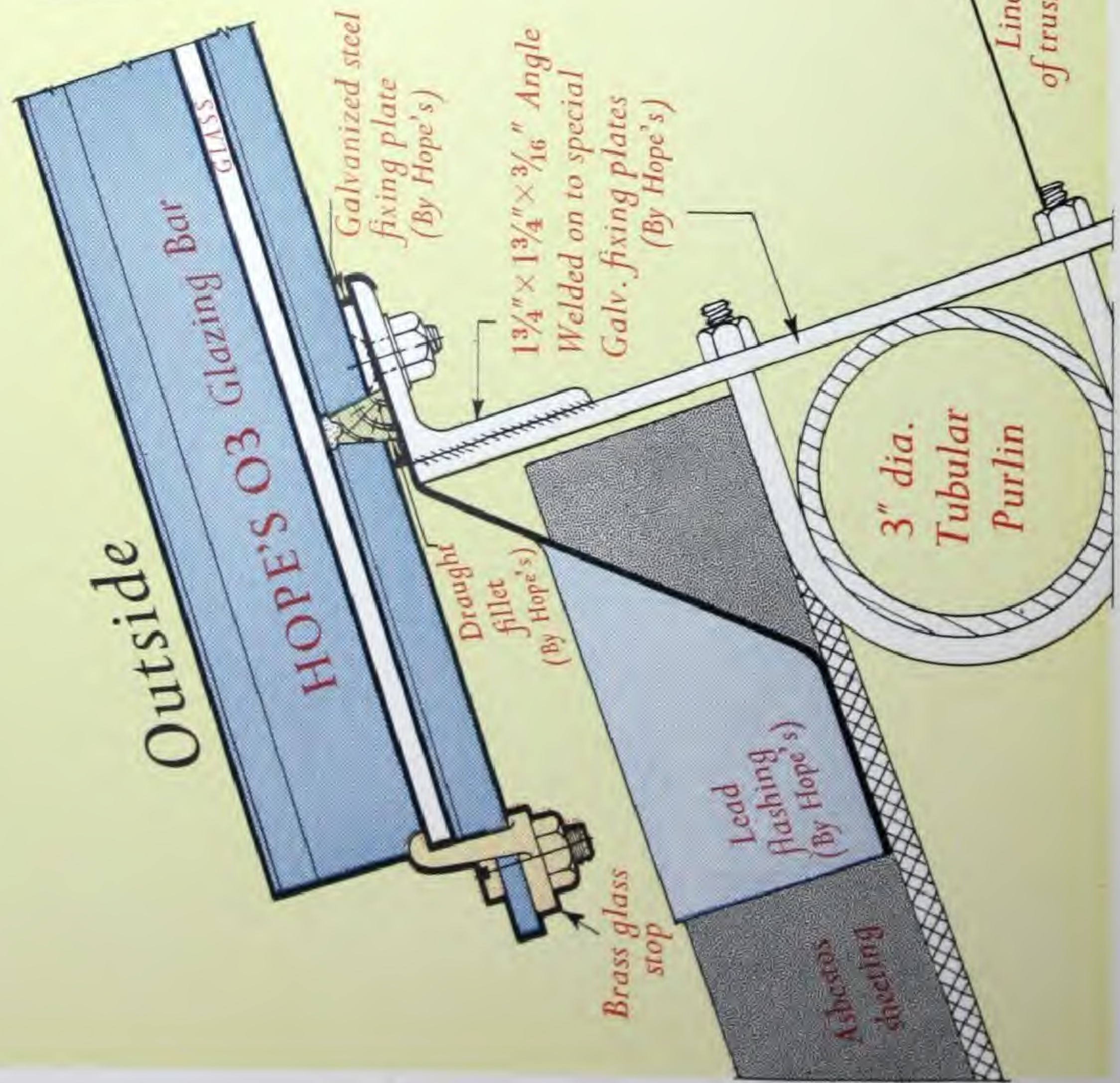


Details  
HALF  
FULL SIZE



# SPAN ROOF PATENT GLAZING Tubular Steel Construction

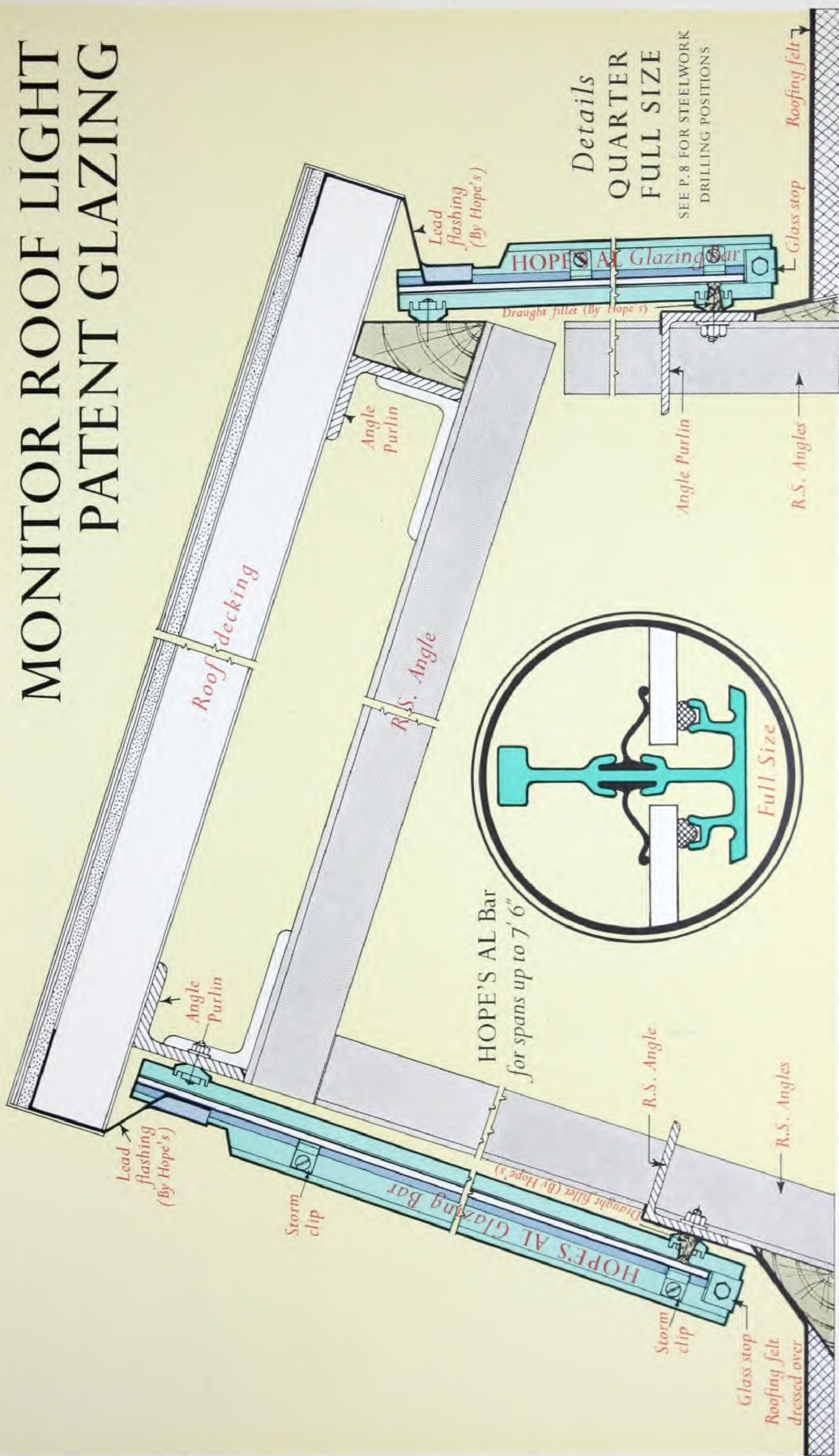
HOPE'S O3 Bar  
for spans up to 11' 0"



Details  
HALF  
FULL SIZE



# MONITOR ROOF LIGHT PATENT GLAZING





# VERTICAL GLAZING to Steelwork



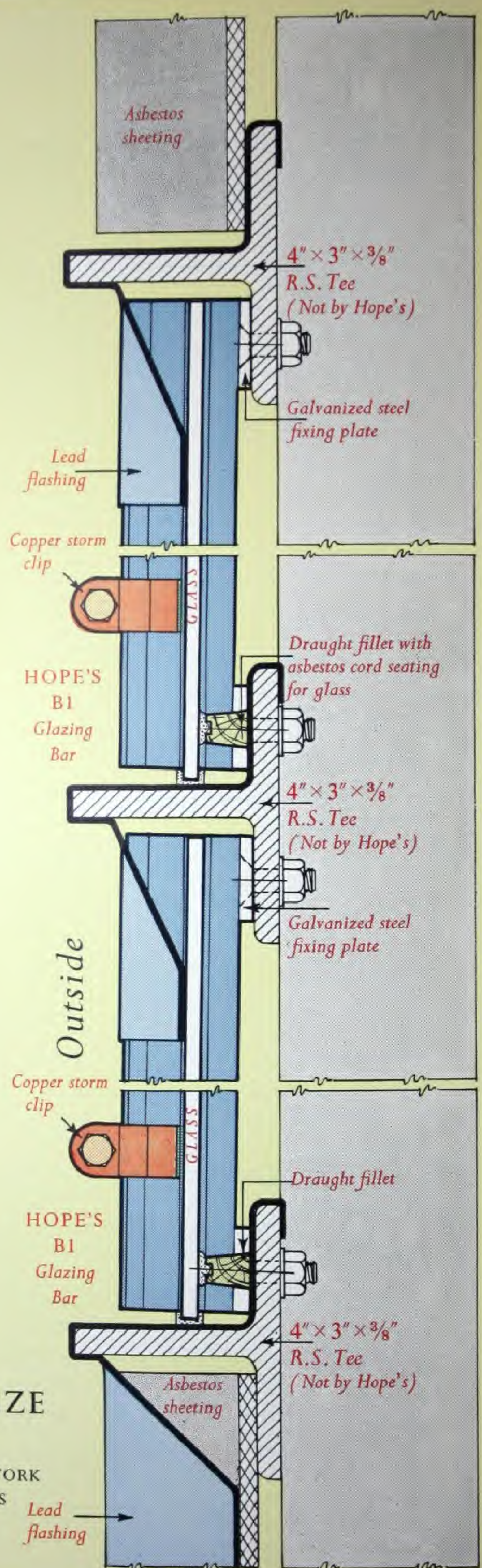
I.C.P. ALDERLEY PARK, CHESHIRE  
Harry S. Fairhurst & Son, Chartered Architects and Surveyors

HOPE'S B1 Bar  
for spans up to 7' 6"



## HALF FULL SIZE DETAILS

SEE PAGE 7 FOR STEELWORK  
DRILLING POSITIONS

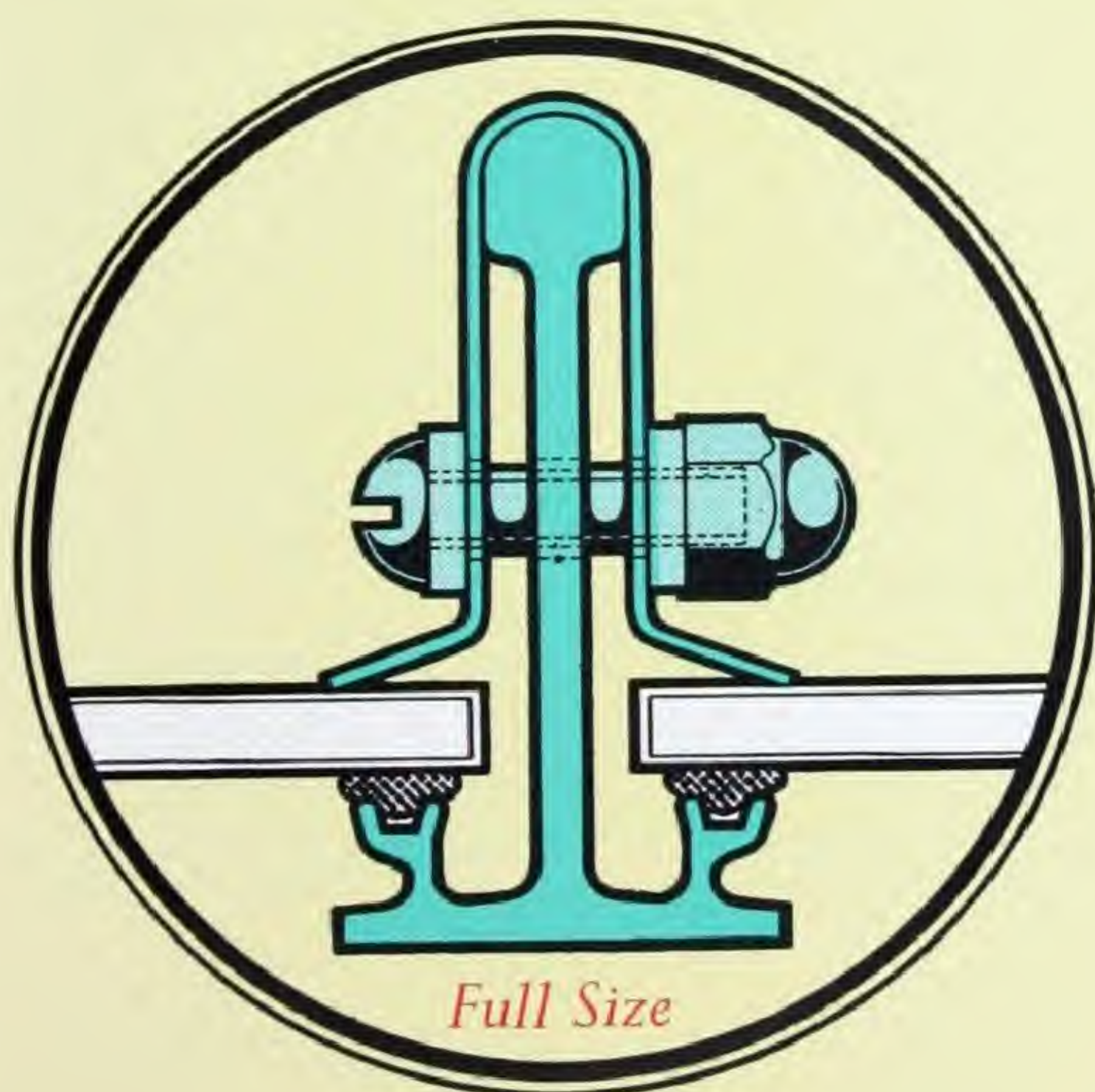




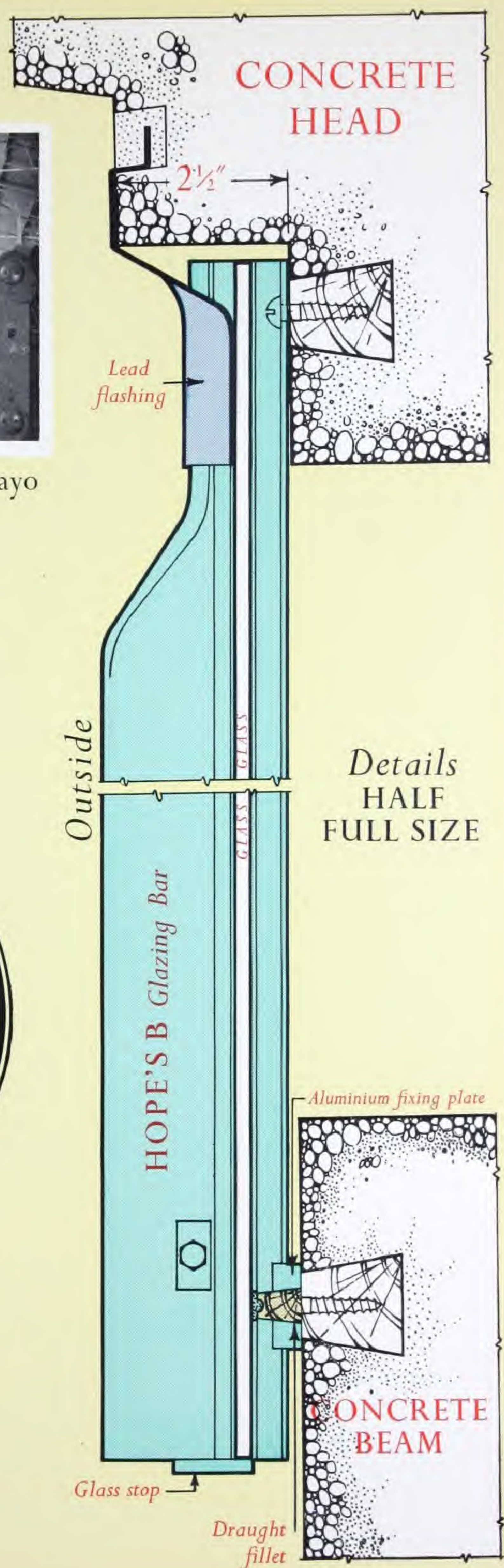
# VERTICAL GLAZING *to Concrete*



DUNLOP RUBBER CO. LTD, Bulawayo  
*Stuart Bentley F.R.I.B.A., Architect*



HOPE'S B Bar  
 for spans up to 9' 0"





# HOPE'S *Vertical Patent Glazing*



I·C·I·LTD, WITTON

*Boiler House*

*Consulting Architects: A.M. Gear & Associates*

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**O**n pages 26–33 we show photographs and details of several recent contracts for vertical glazing to illustrate the great variety of treatment which can be obtained by the use of our bars. We are always glad of the opportunity to submit schemes for special requirements.



# HOPE'S Vertical Patent Glazing

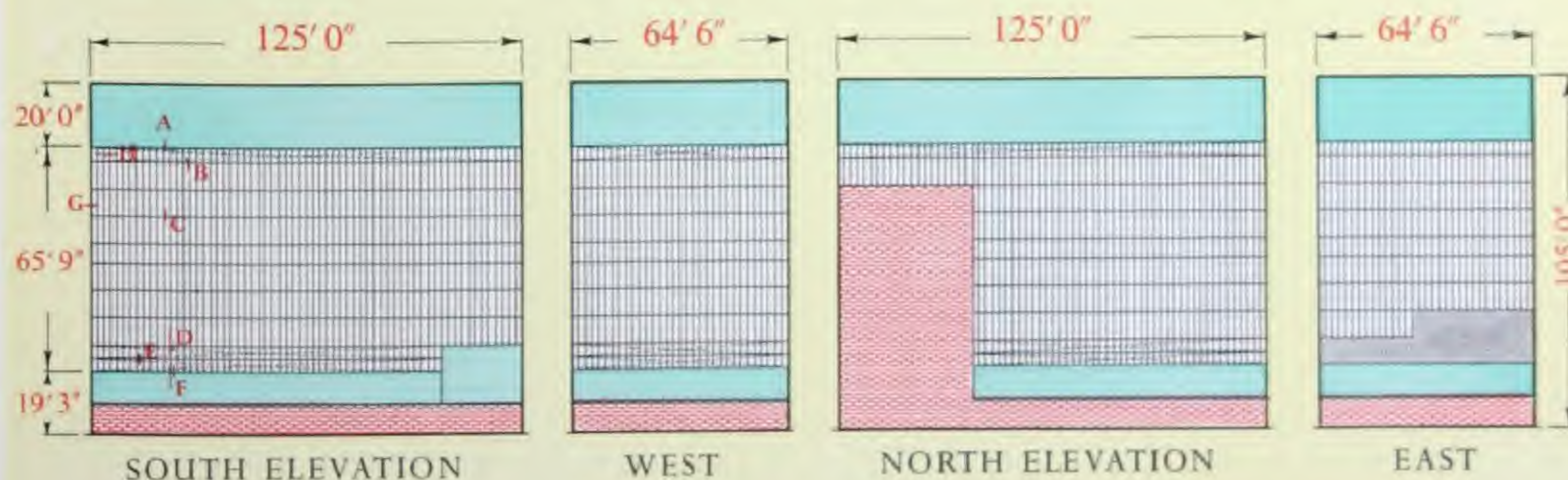
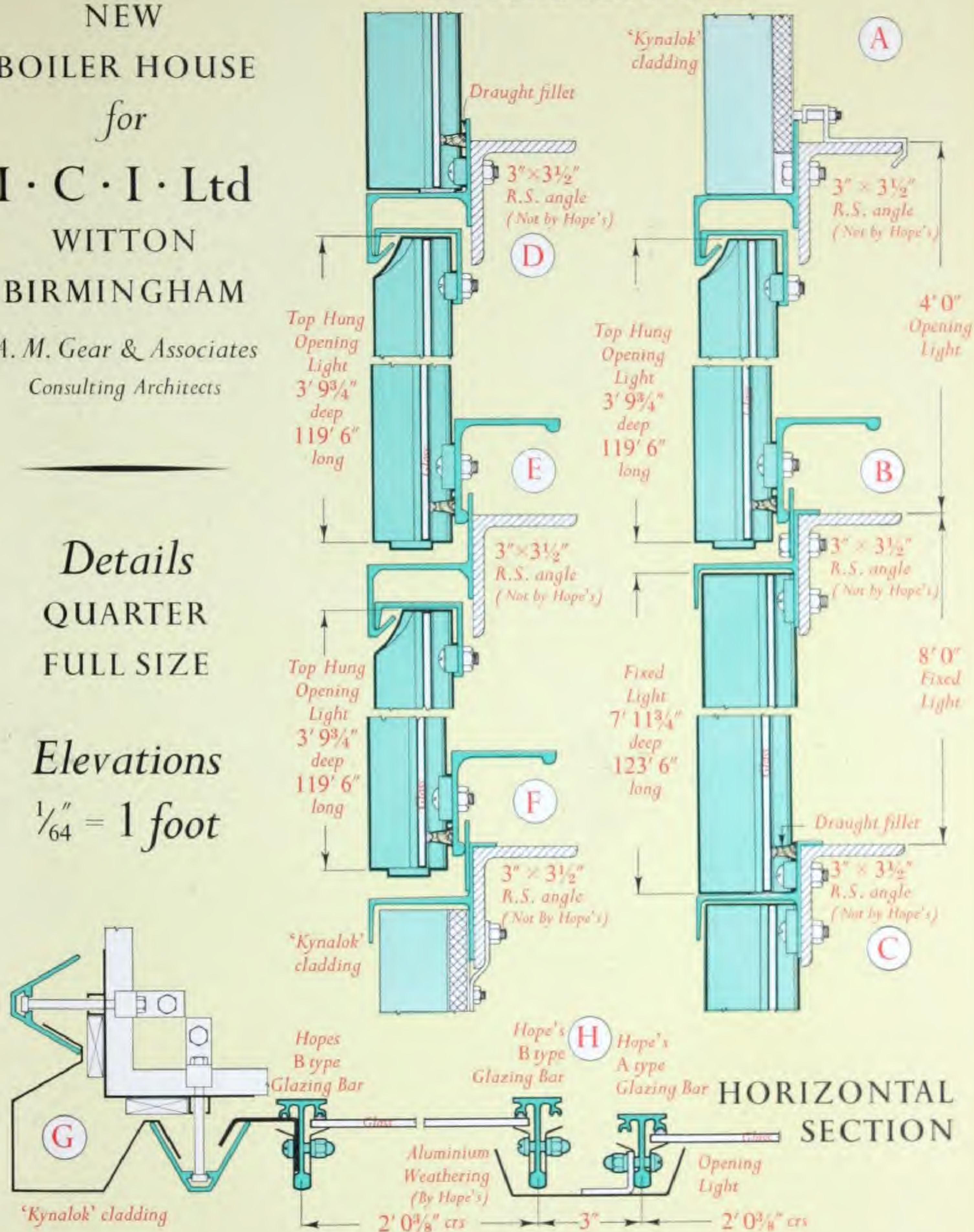
NEW  
BOILER HOUSE  
for  
I · C · I · Ltd  
WITTON  
BIRMINGHAM

A. M. Gear & Associates  
Consulting Architects

Details  
QUARTER  
FULL SIZE

Elevations  
 $\frac{1}{64}'' = 1 \text{ foot}$

## VERTICAL SECTIONS





# HOPE'S *Vertical Patent Glazing*



THE BRISTOL AEROPLANE COMPANY LTD

*Architect: Eric Ross, F.R.I.B.A.*



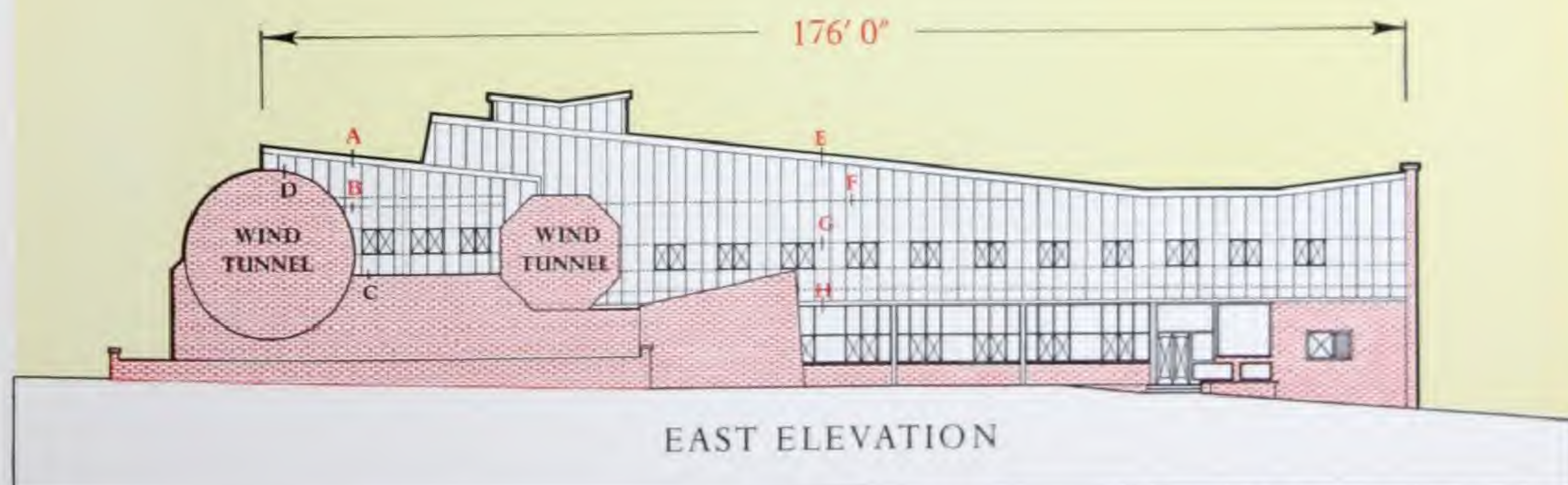
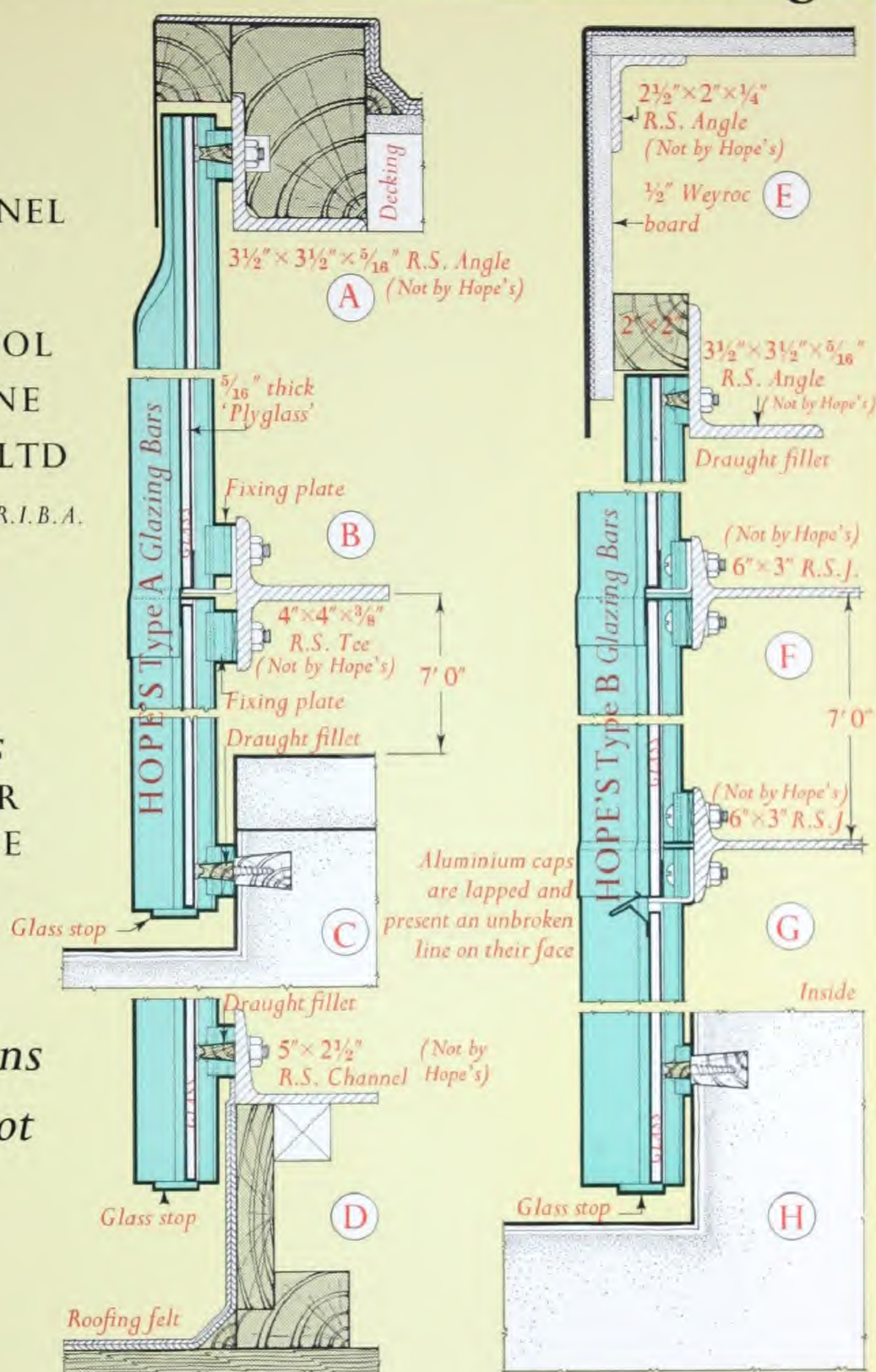
# HOPE'S Vertical Patent Glazing

No. 4  
WIND TUNNEL  
for  
THE BRISTOL  
AEROPLANE  
COMPANY LTD

Architect: Eric Ross, F.R.I.B.A.

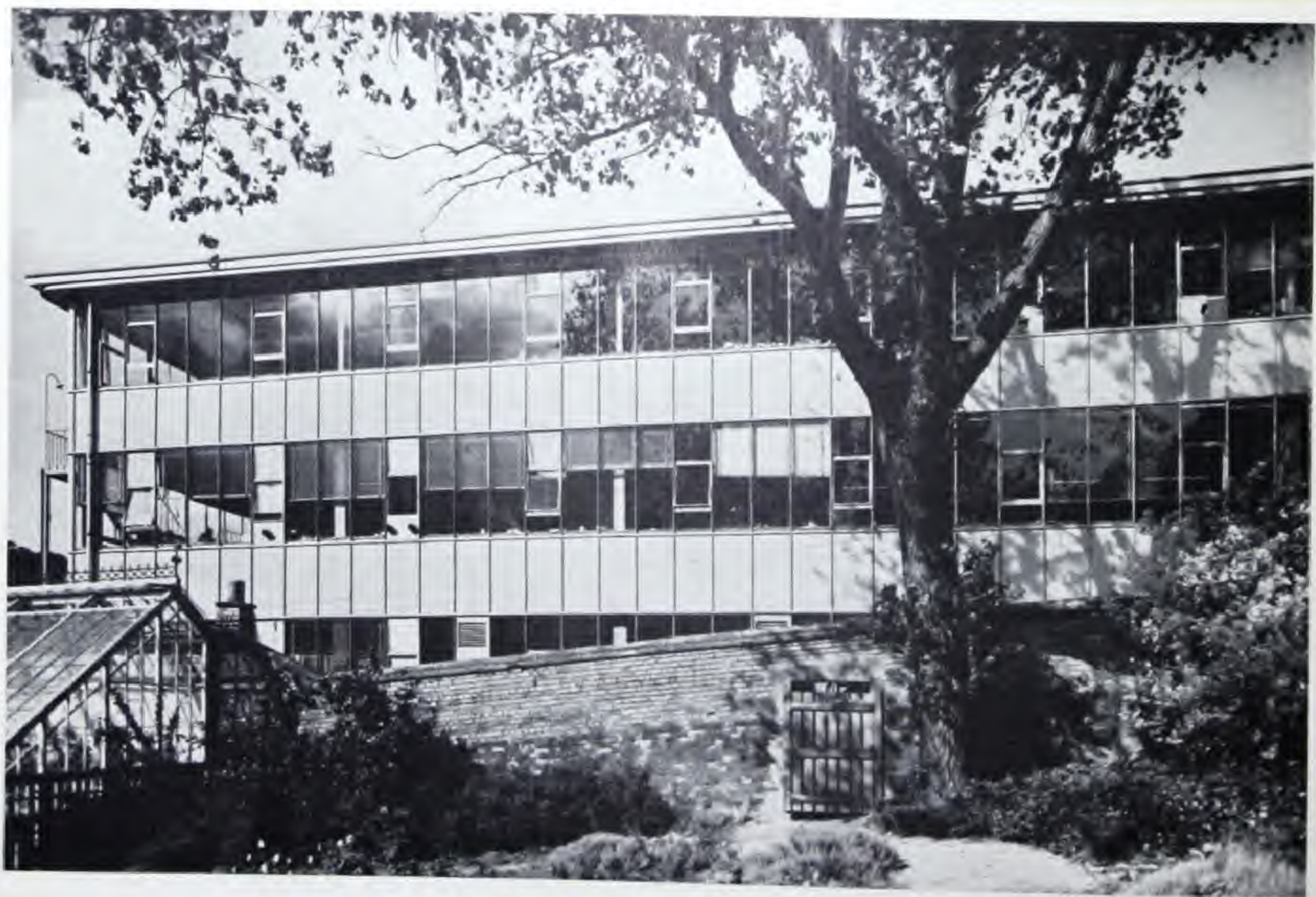
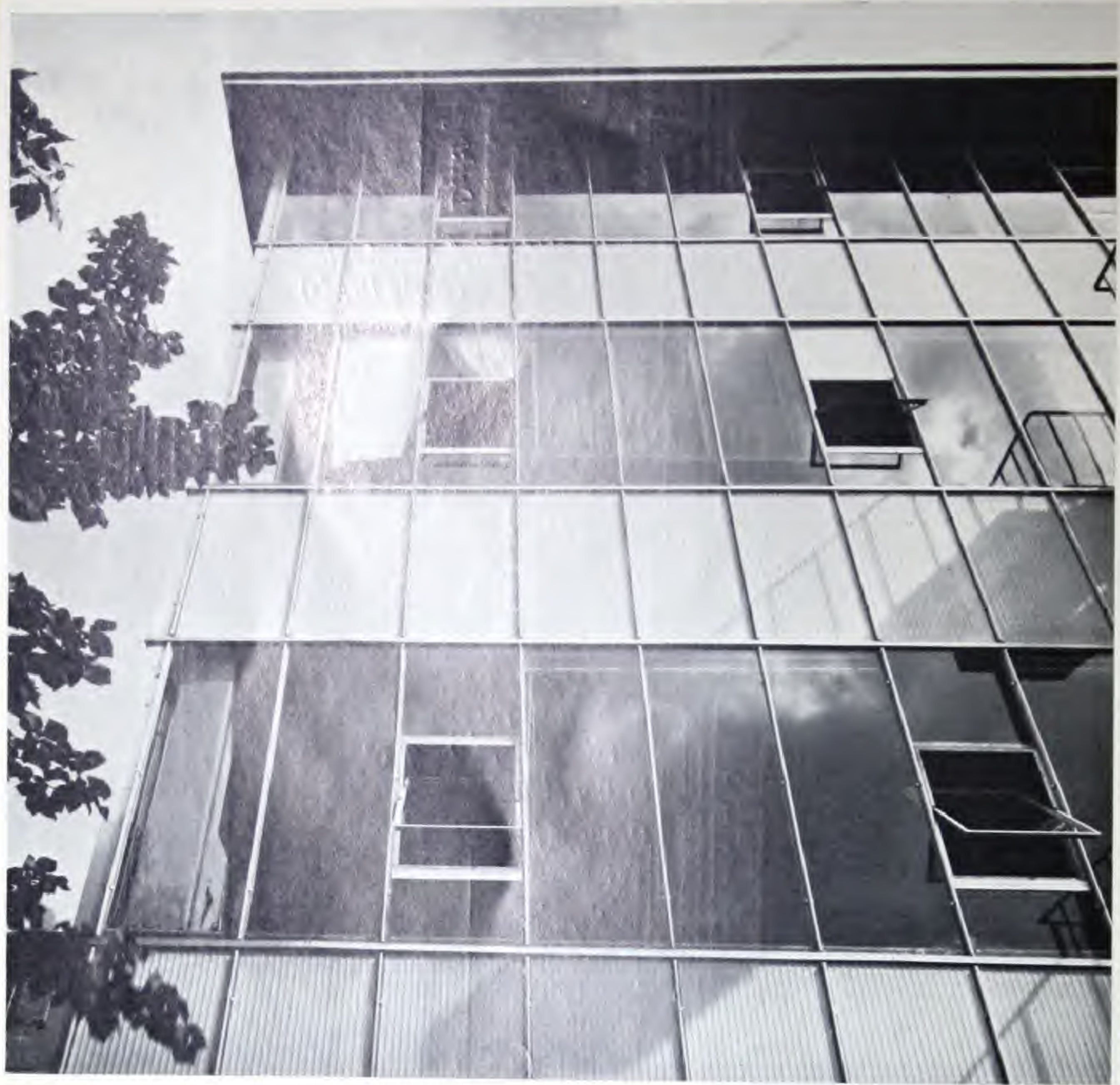
Details  
QUARTER  
FULL SIZE

Elevations  
 $\frac{1}{32}'' = 1 \text{ foot}$





# HOPE'S *Vertical Patent Glazing*



TEBBUTT & HALL BROTHERS LTD, Northampton  
*Architects: Gotch, Saunders & Surridge*



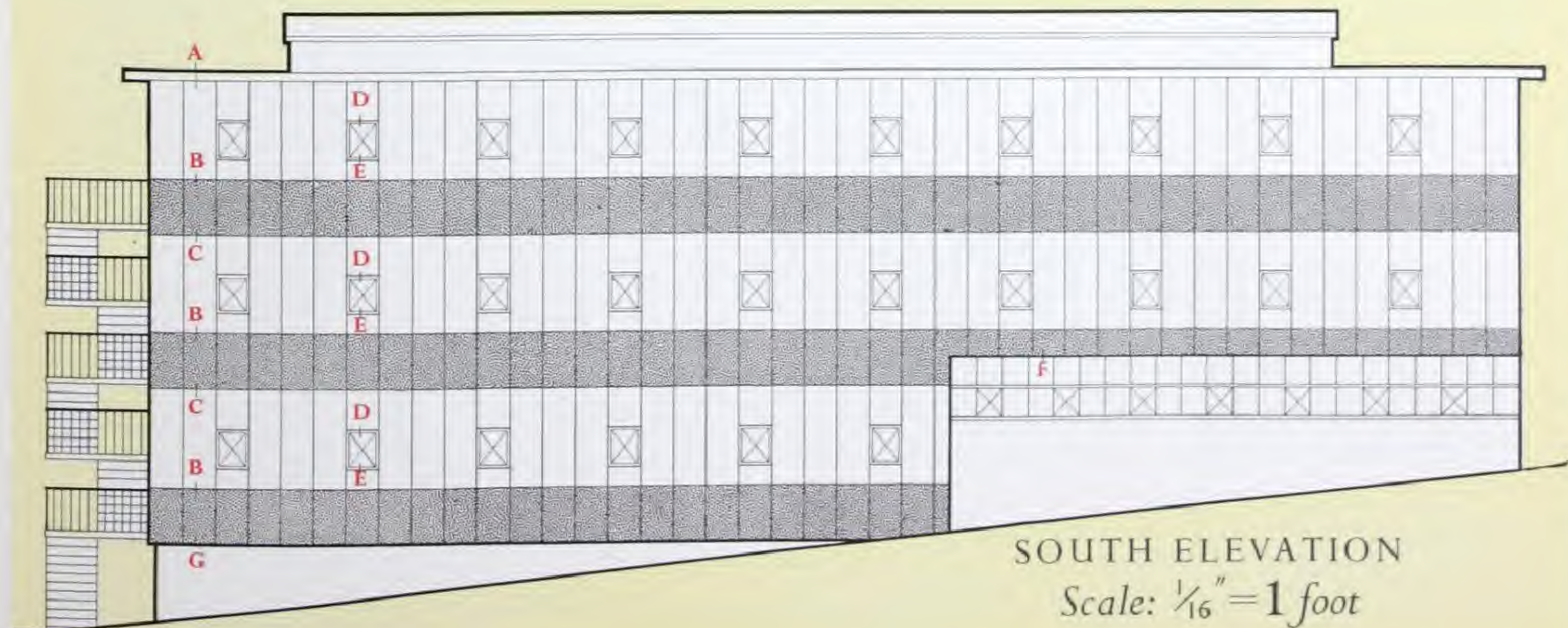
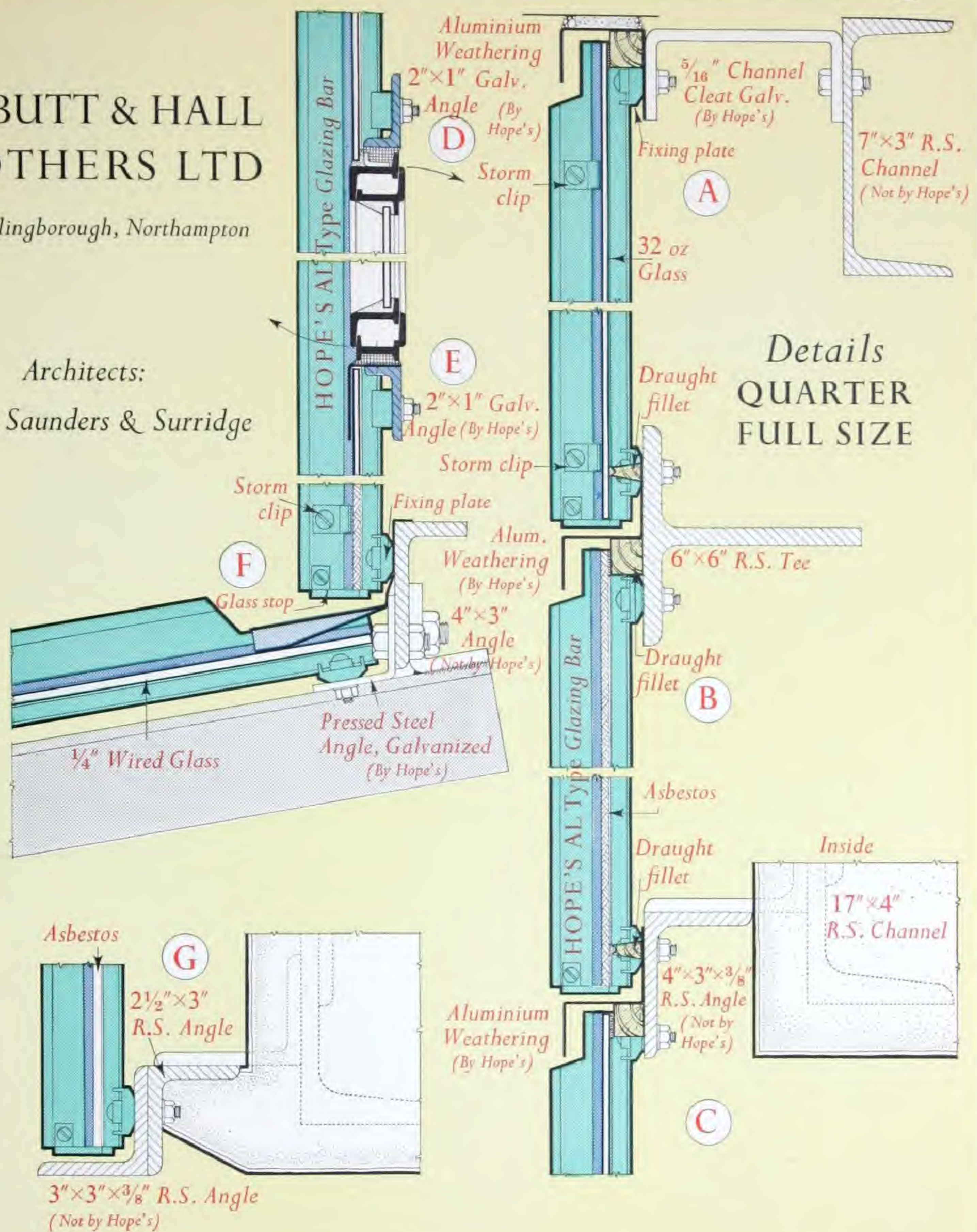
# HOPE'S Vertical Patent Glazing

TEBBUTT & HALL  
BROTHERS LTD

Nr. Wellingborough, Northampton

Architects:

Gotch, Saunders & Surridge





# HOPE'S *Vertical Patent Glazing*



THE AUSTIN MOTOR COMPANY

*Harry W. Weedon, F.R.I.B.A., and Partners, Chartered Architects*



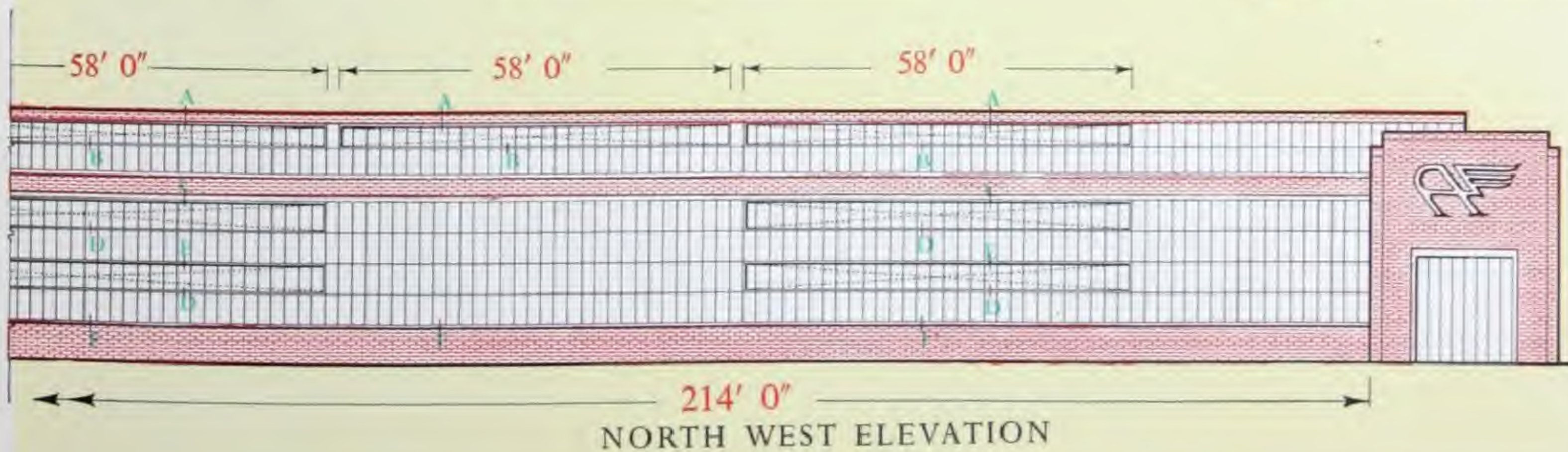
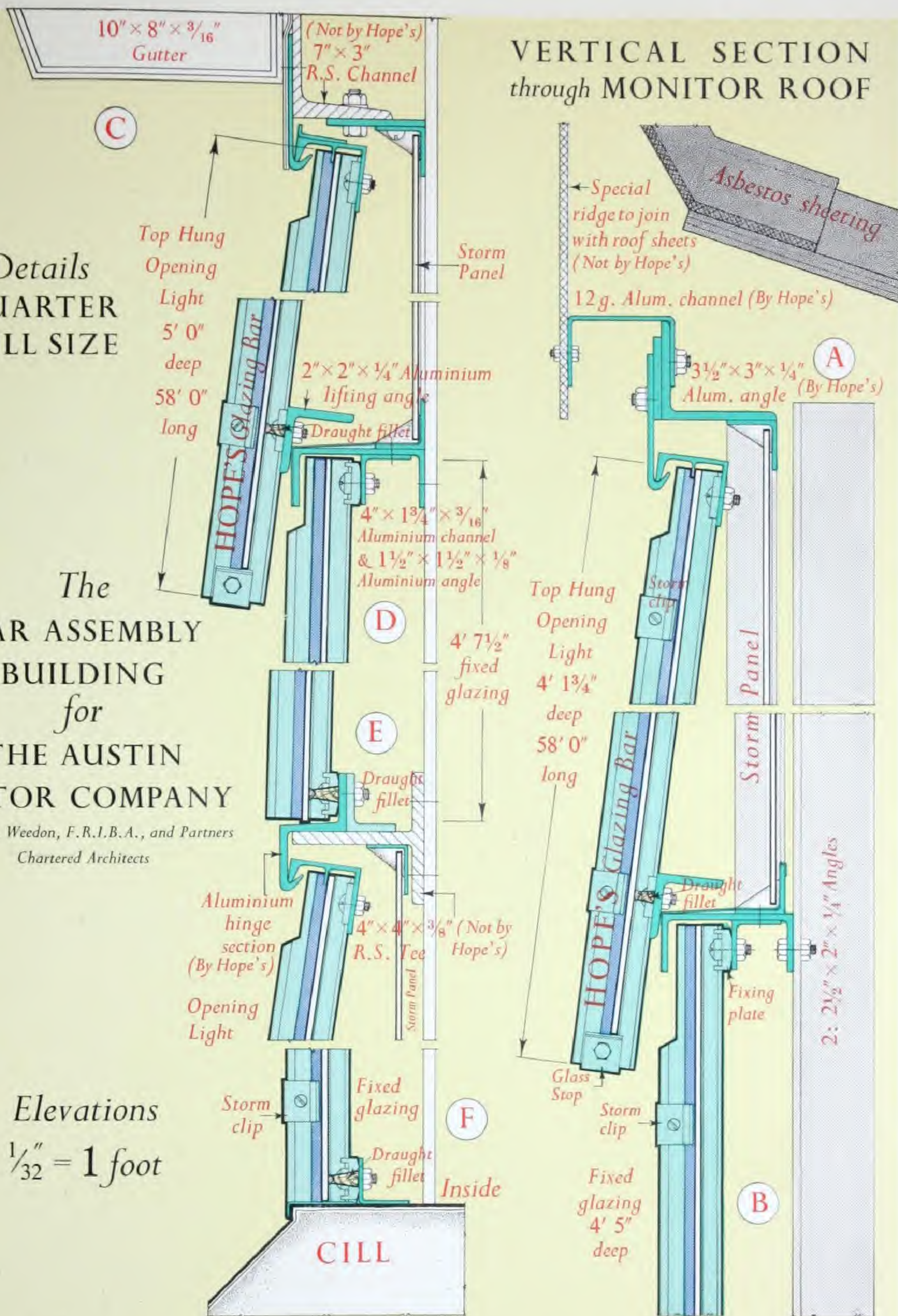
Details  
QUARTER  
FULL SIZE

The  
CAR ASSEMBLY  
BUILDING  
for  
THE AUSTIN  
MOTOR COMPANY

Harry W. Weedon, F.R.I.B.A., and Partners  
Chartered Architects

Elevations  
 $\frac{1}{32}'' = 1 \text{ foot}$

# VERTICAL SECTION through MONITOR ROOF





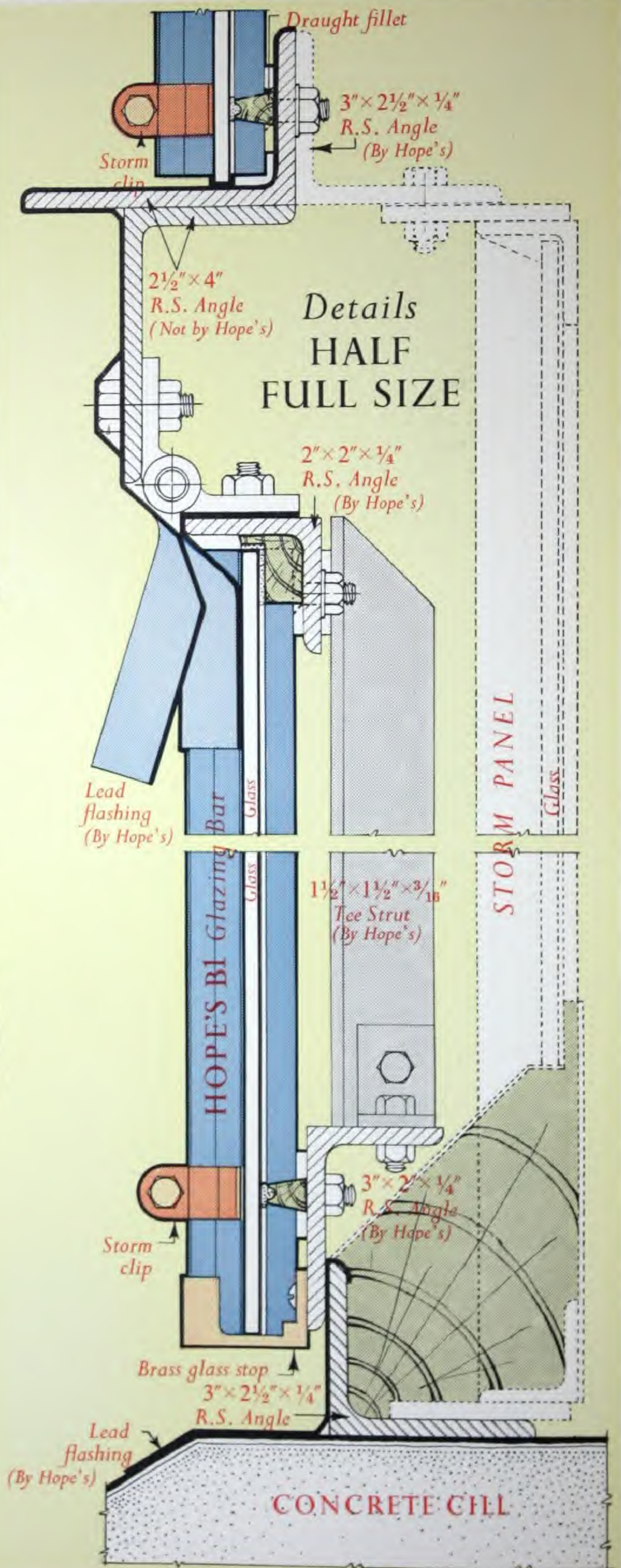
# CONTINUOUS OPENING



Priestman Brothers Ltd, Hull  
Priestman & Lazenby, Chartered Architects



HOPE'S B1 Bar  
for spans up to 7' 6"





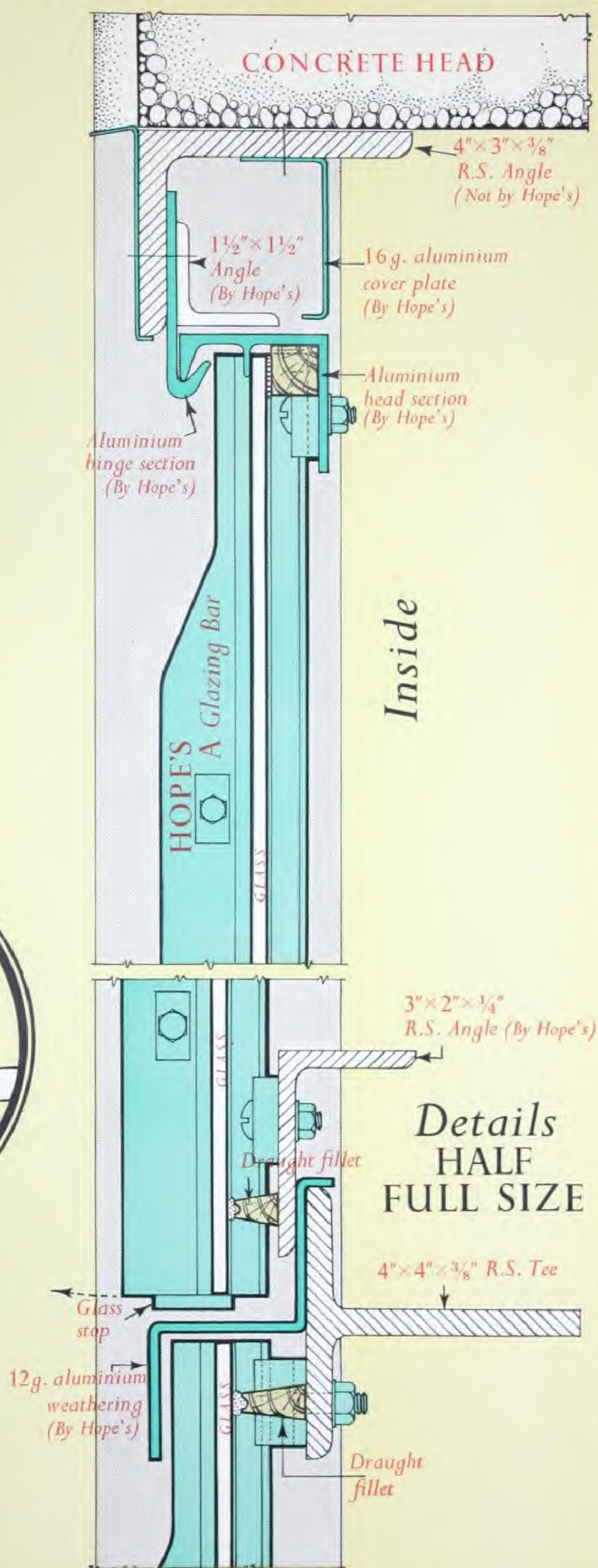
# LIGHTS *Applied to Vertical Glazing*



Ford Motor Co. Ltd, Dagenham  
 Martin Hutchinson, L.R.I.B.A., Architect  
 Posford, Parry & Partners  
 Consulting & Chartered Civil Engineers



HOPE'S A Bar  
 for spans up to 7' 6"

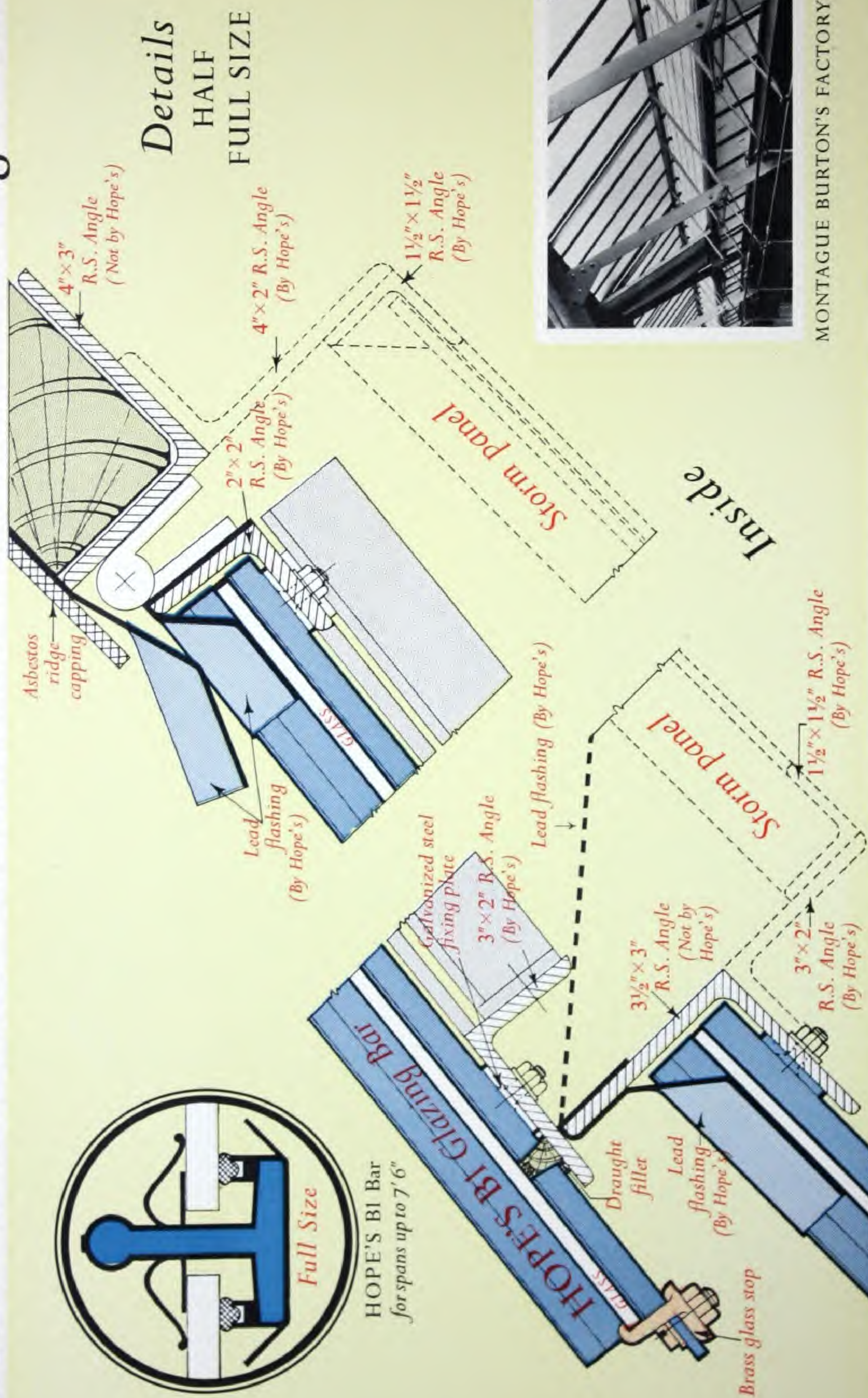




# CONTINUOUS OPENING LIGHT North Light Glazing



HOPE'S B1 Bar  
for spans up to 7' 6"



MONTAGUE BURTON'S FACTORY, LEEDS

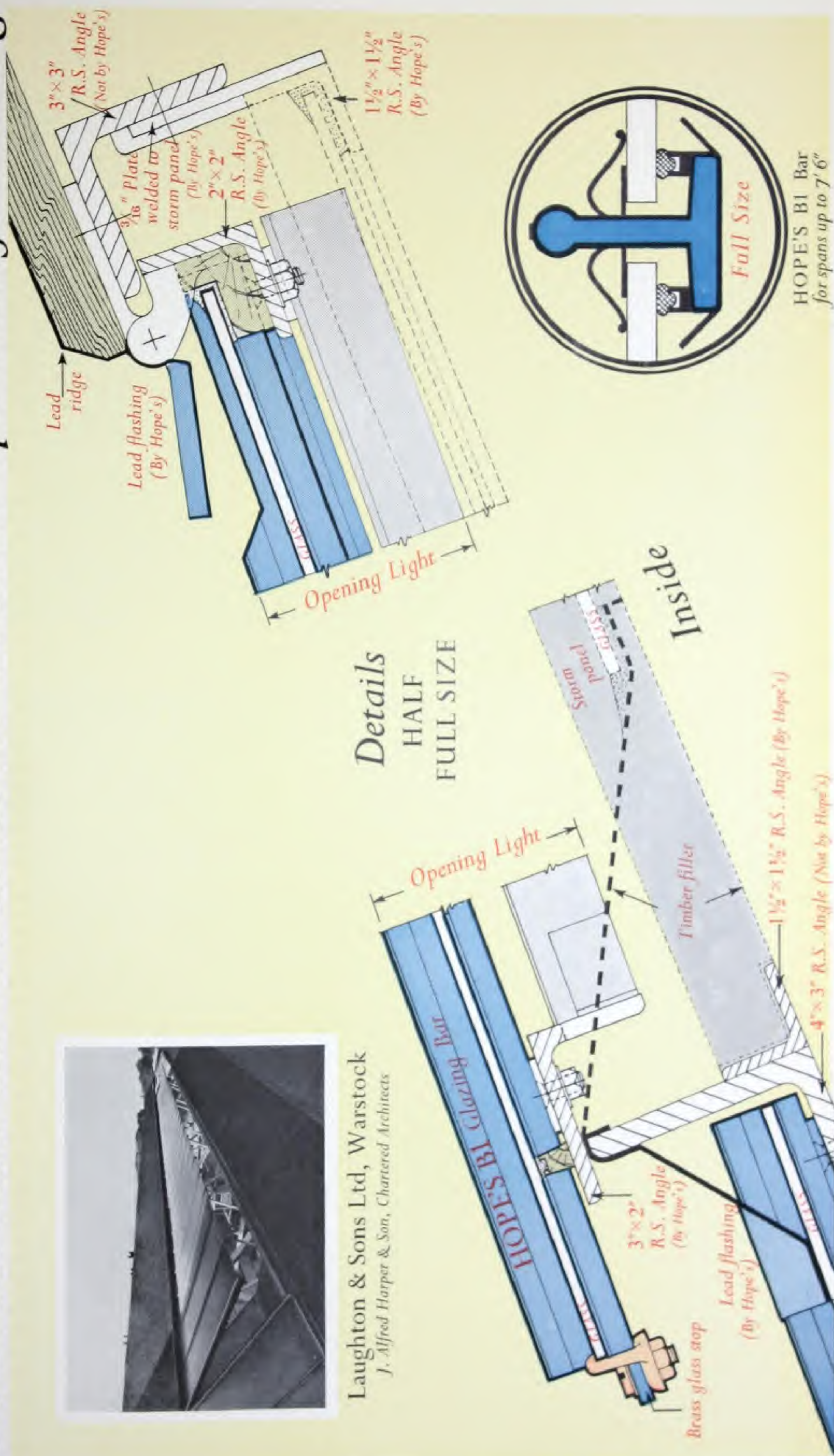


# CONTINUOUS OPENING LIGHT Span Roof Glazing



Laughton & Sons Ltd, Warstock  
J. Alfred Harper & Son, Chartered Architects

Details  
HALF  
FULL SIZE



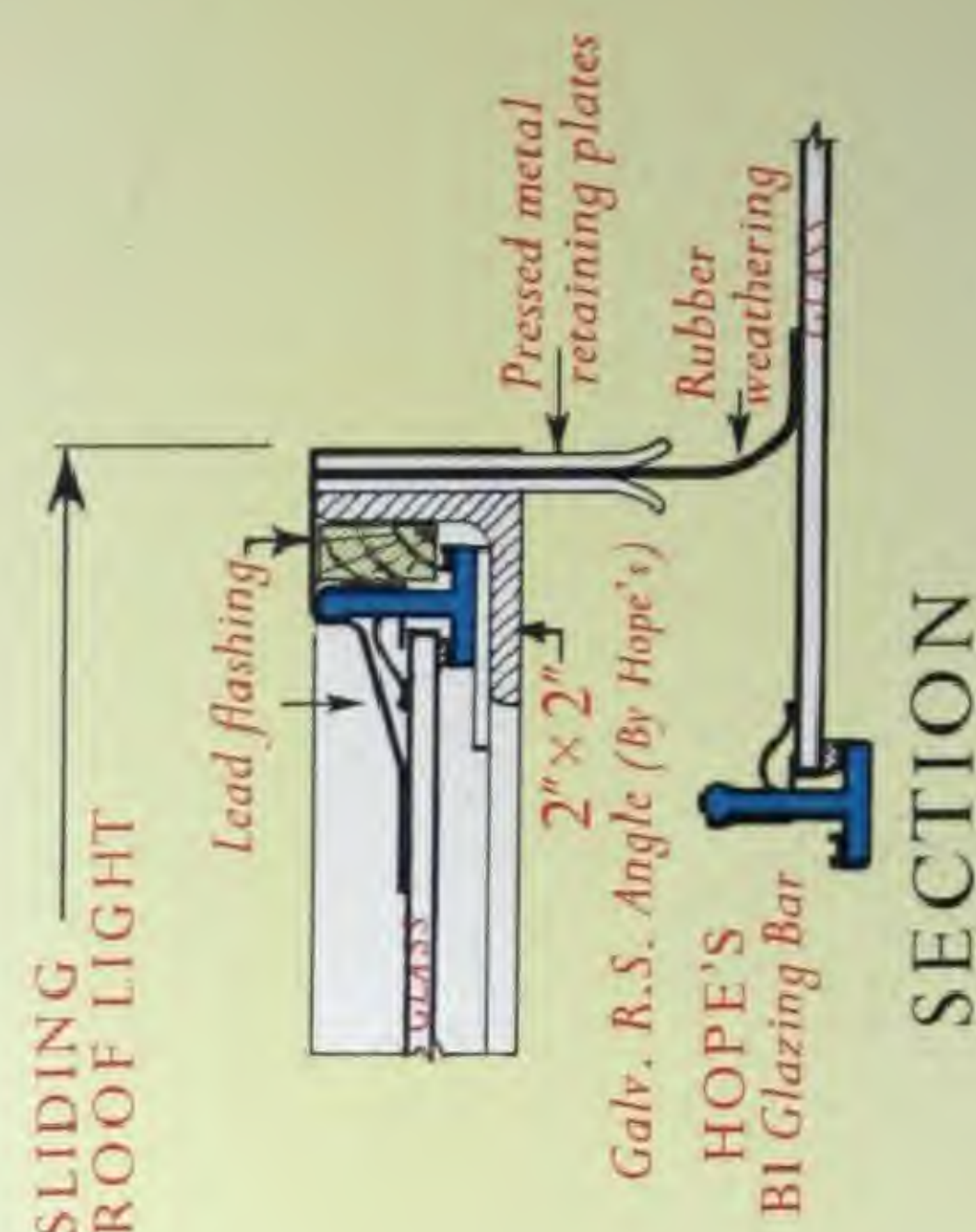
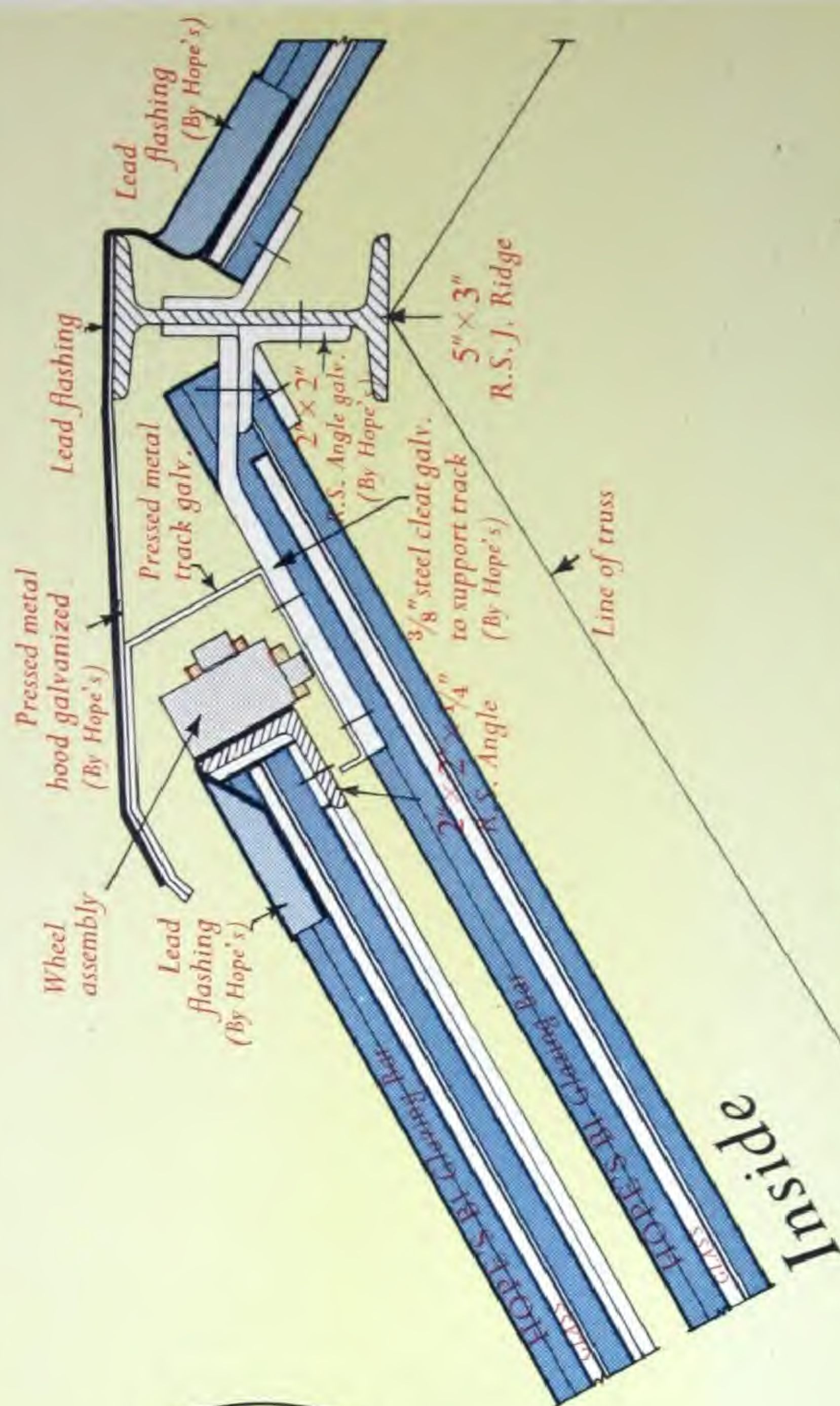
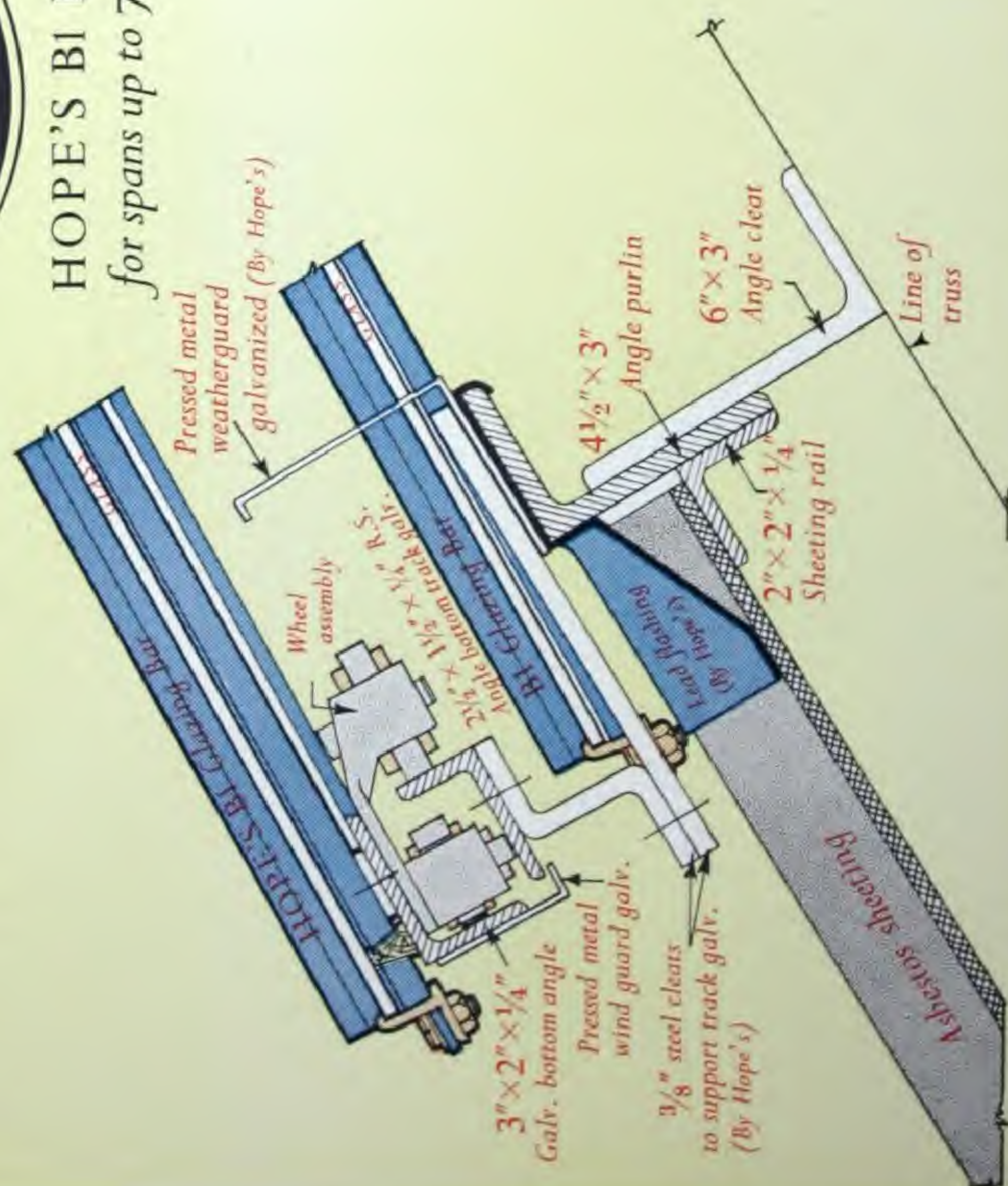


# HOPE'S SLIDING ROOF LIGHTS

## Details QUARTER FULL SIZE



HOPE'S B1 Bar  
for spans up to 7' 6"





# HOPE'S *Sliding* ROOF LIGHTS



THE DELTA METAL CO. LTD. BIRMINGHAM

*W. J. Green and Associates, Architects*

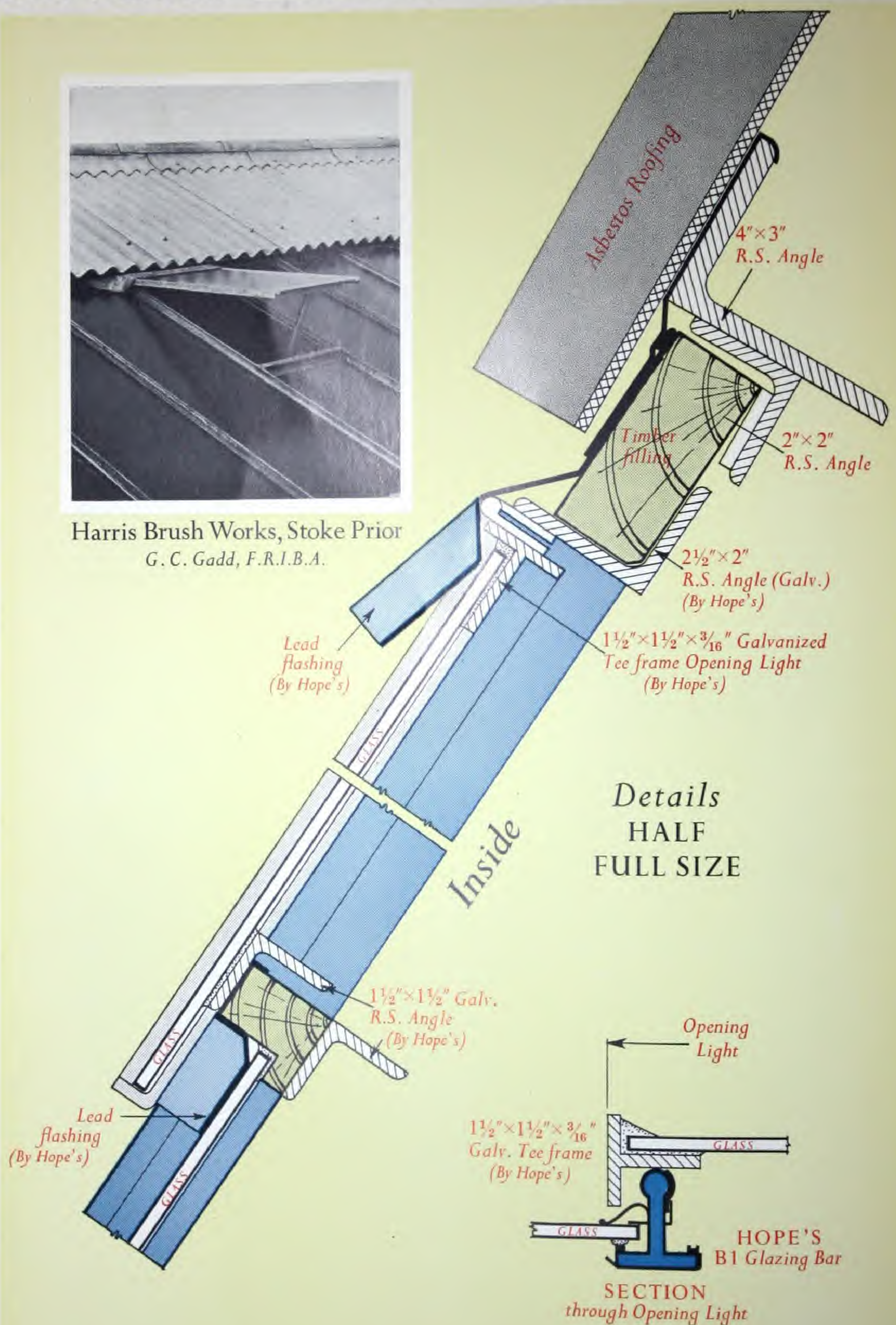
So great was the concentration of fumes in this casting shop that the wooden louvres and extractor cowls were quite inadequate. After fitting Hope's Sliding Ventilators, however, the air was kept clear of fumes at all times. At a touch of the electric push-button whole sections of the roof can be opened to any desired degree. When closed they are completely weatherproof and admit ample daylight.



# SINGLE LIGHT VENTILATORS

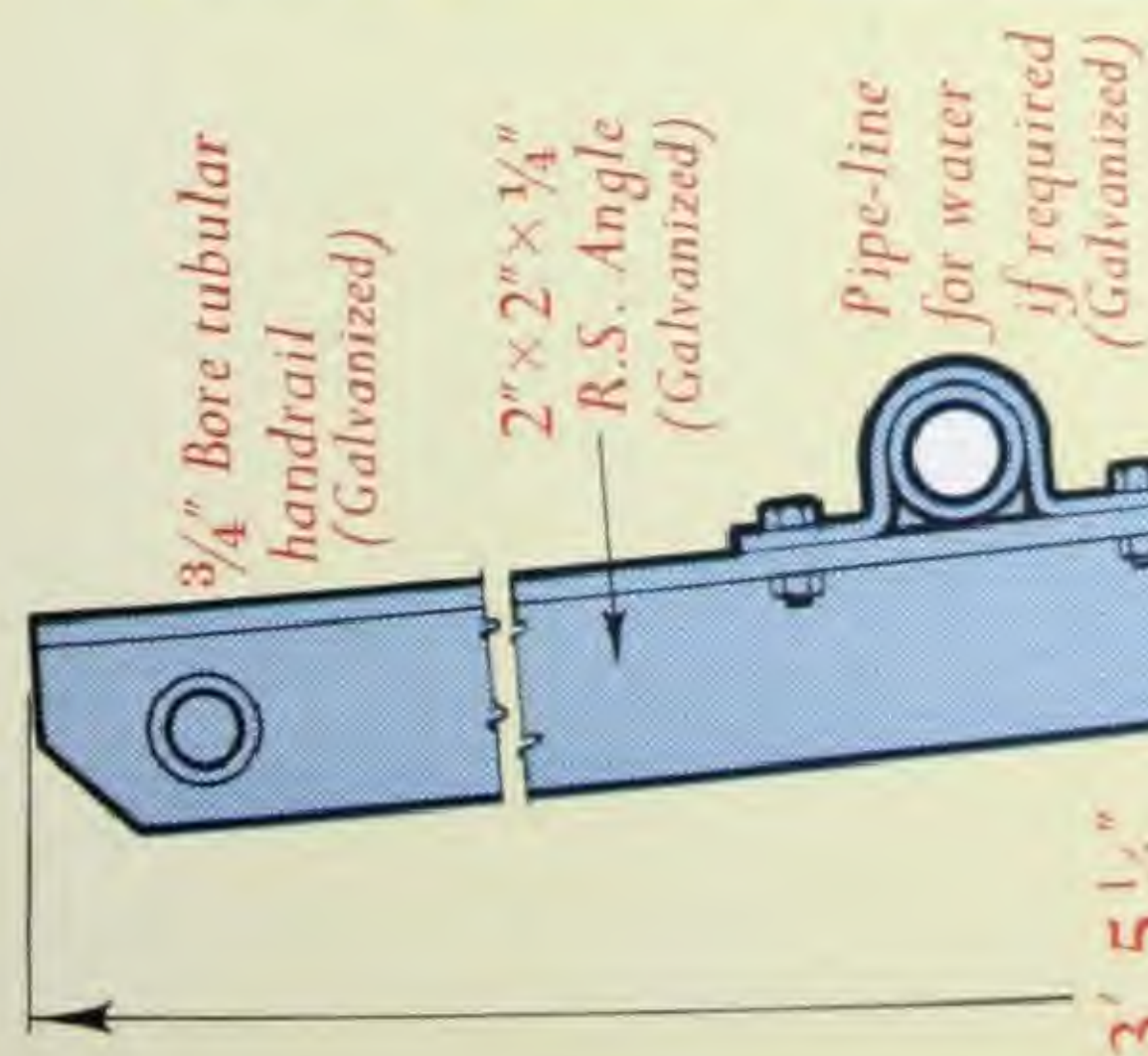


Harris Brush Works, Stoke Prior  
G. C. Gadd, F.R.I.B.A.

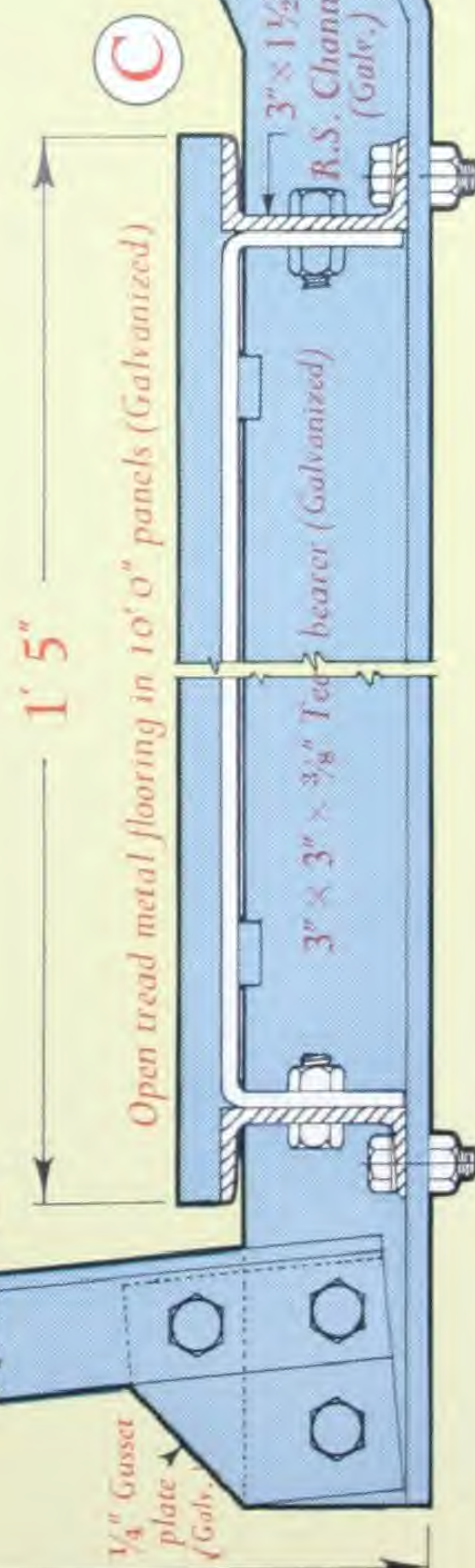
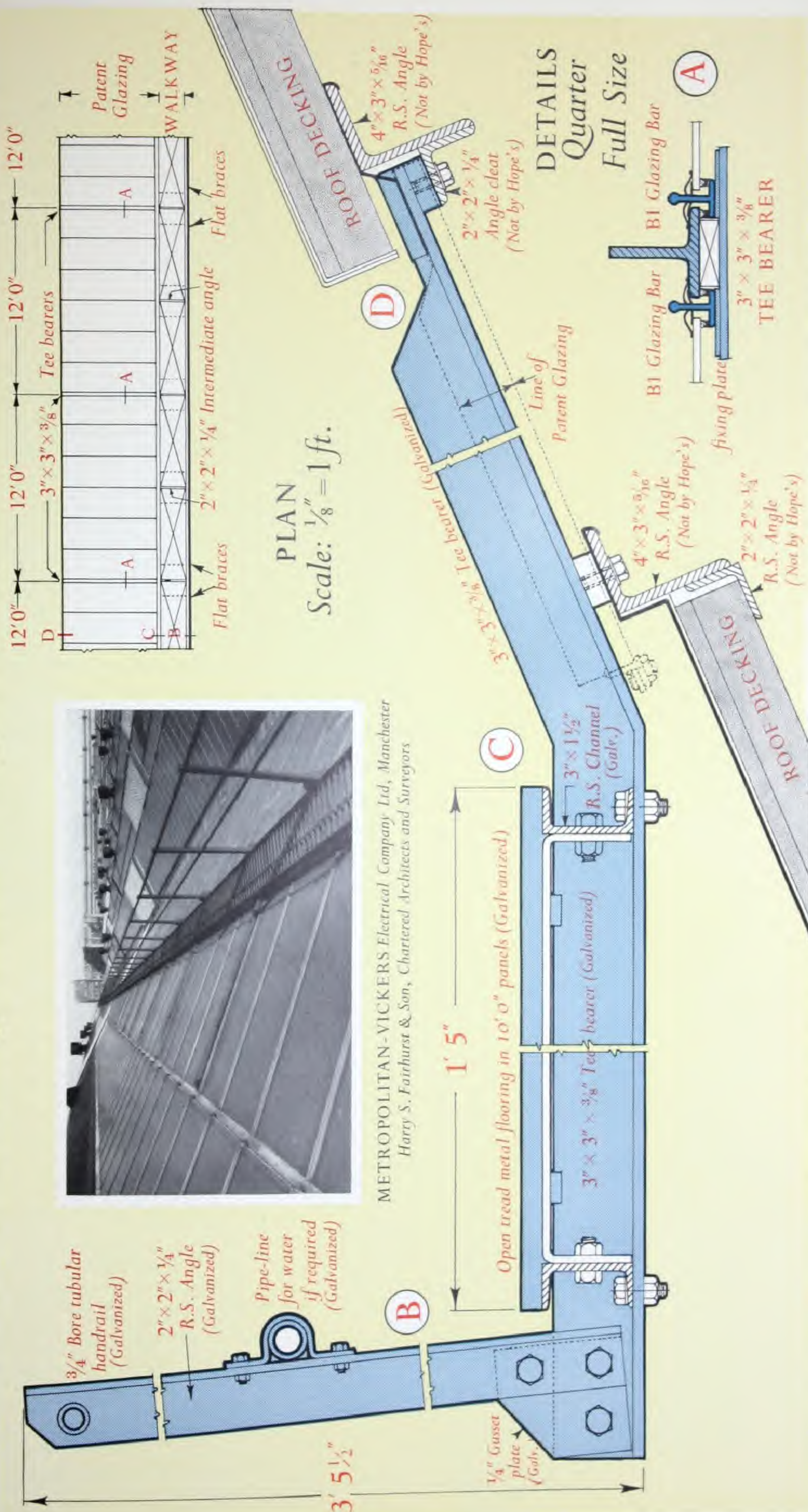




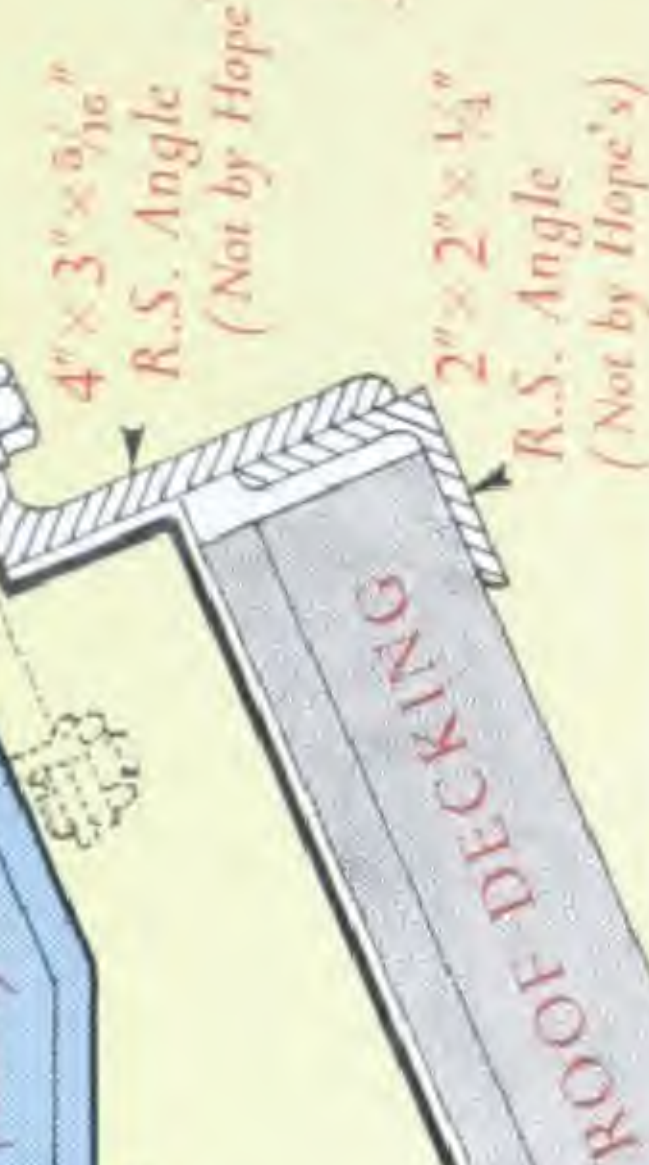
# WALKWAYS for cleaning GLASS ROOFING



METROPOLITAN-VICKERS Electrical Company Ltd, Manchester  
Harry S. Fairhurst & Son, Chartered Architects and Surveyors

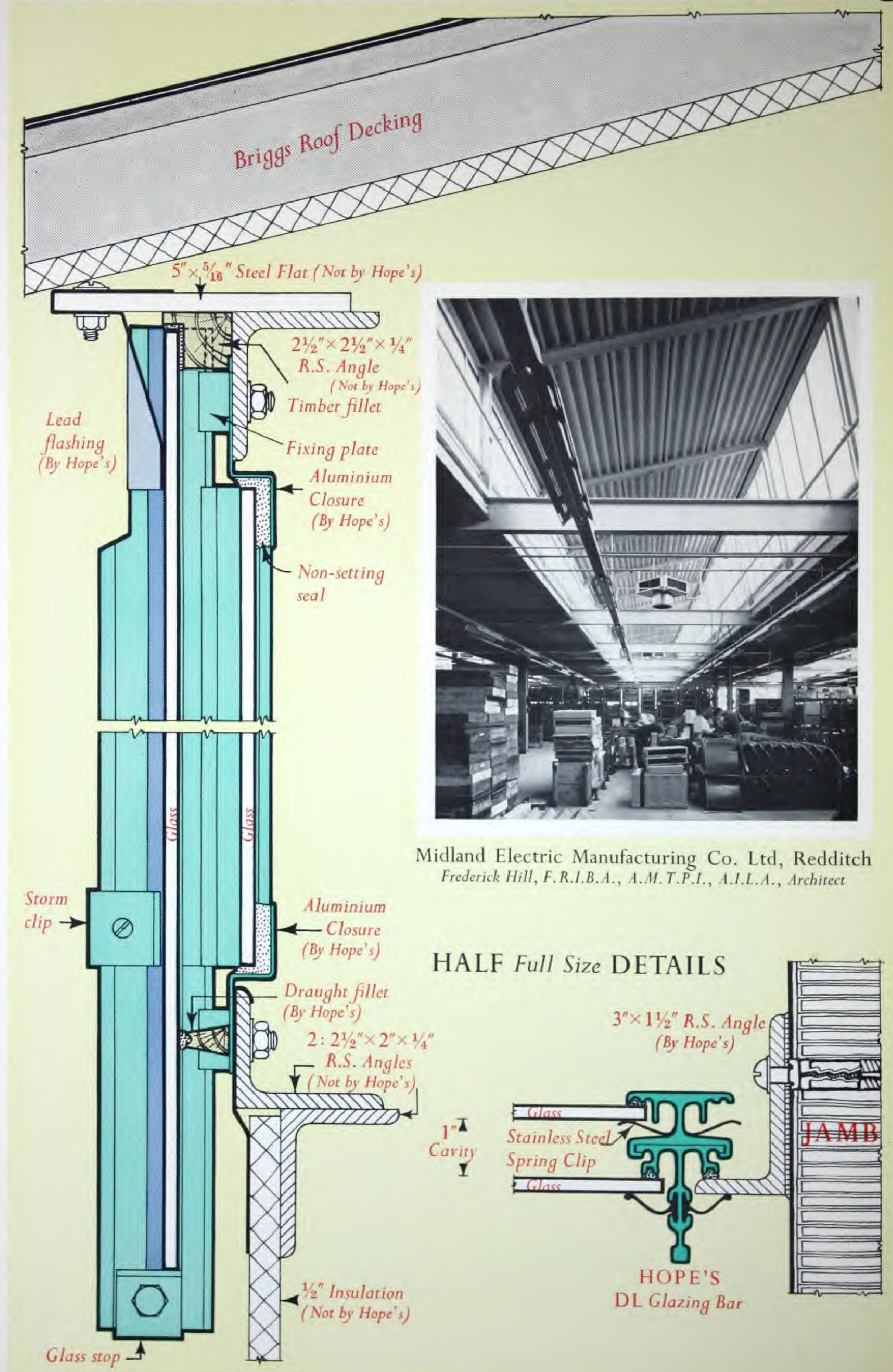


DETAILS  
Quarter  
Full Size



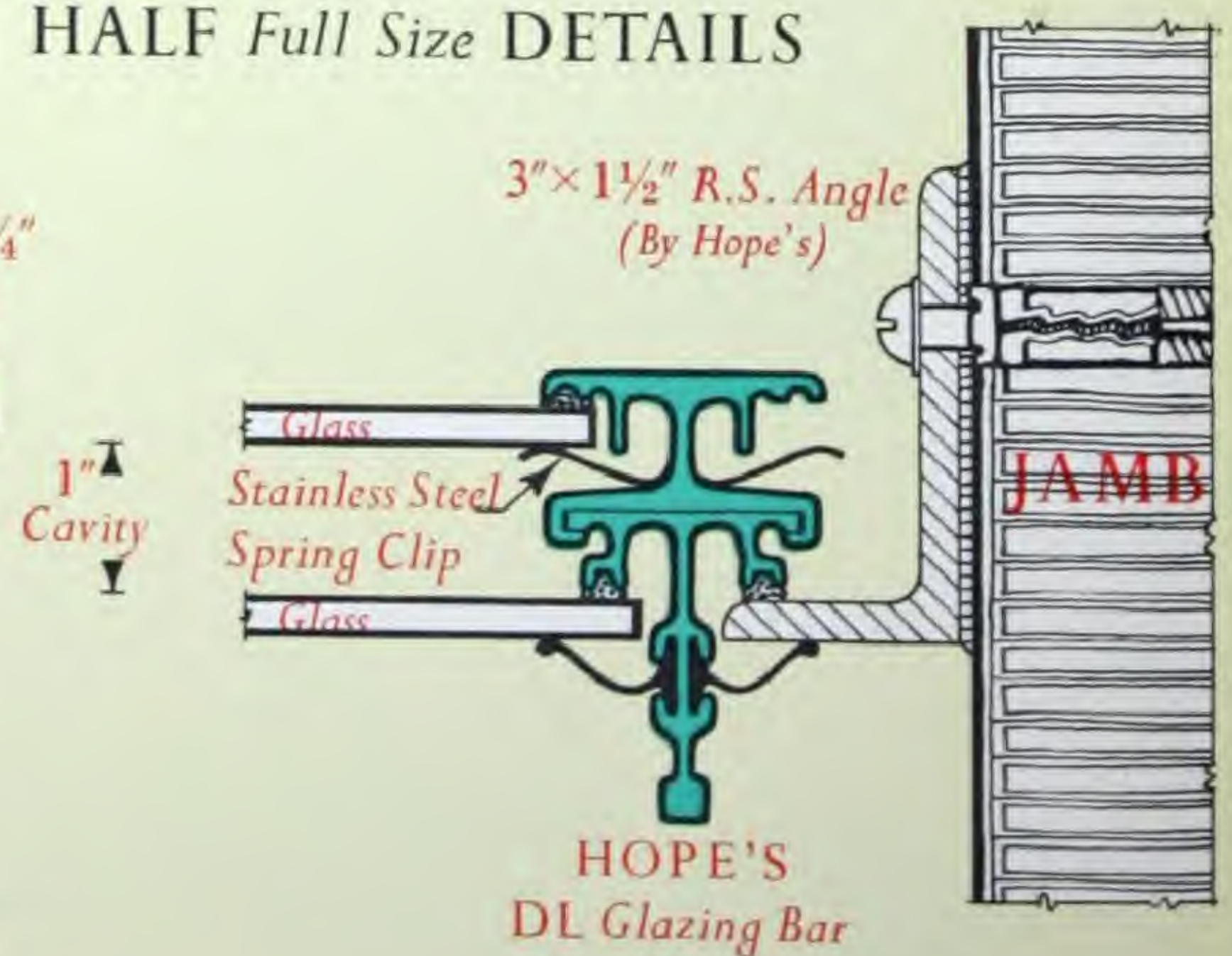


# Vertical DOUBLE Patent Glazing



Midland Electric Manufacturing Co. Ltd, Redditch  
Frederick Hill, F.R.I.B.A., A.M.T.P.I., A.I.L.A., Architect

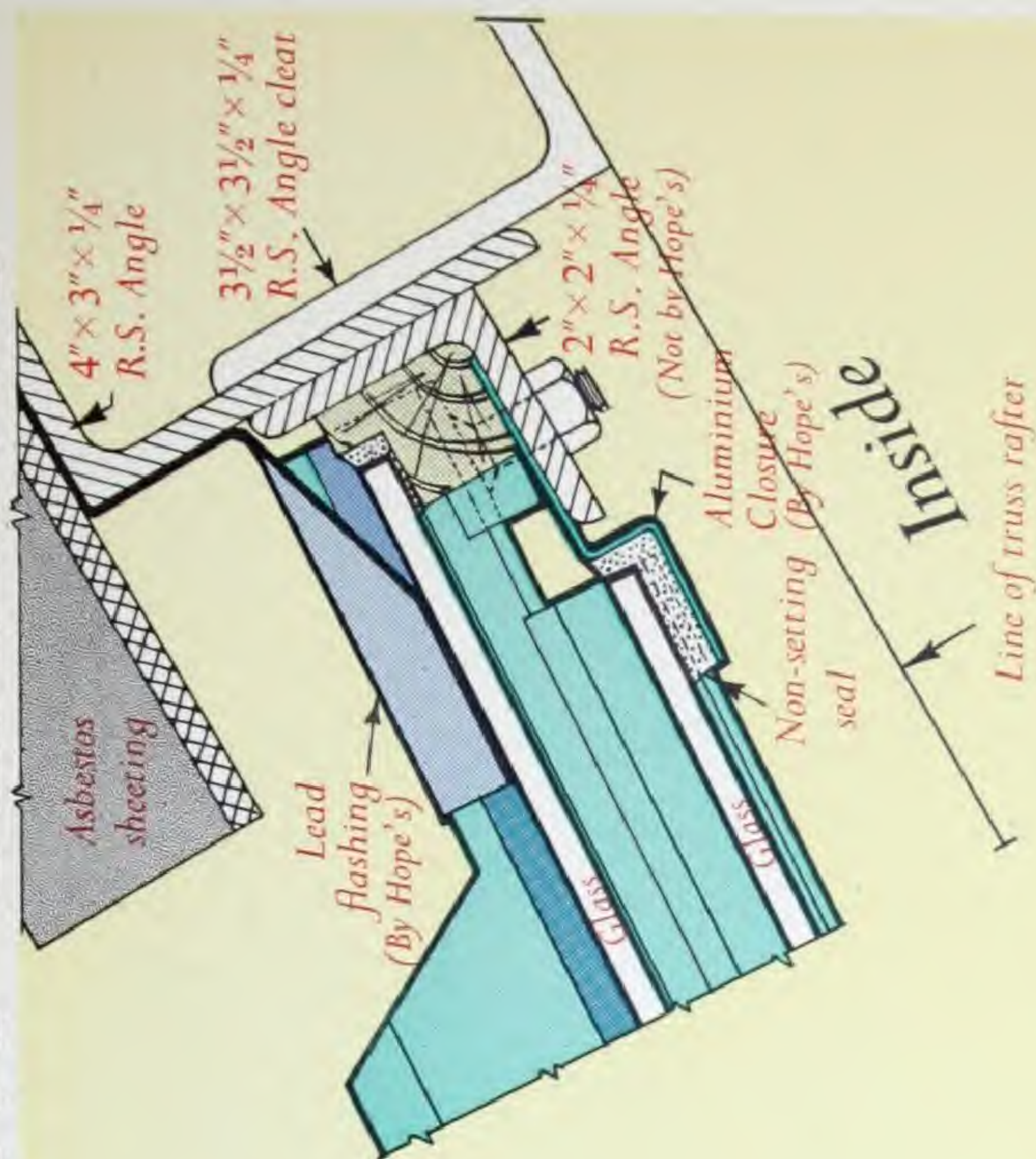
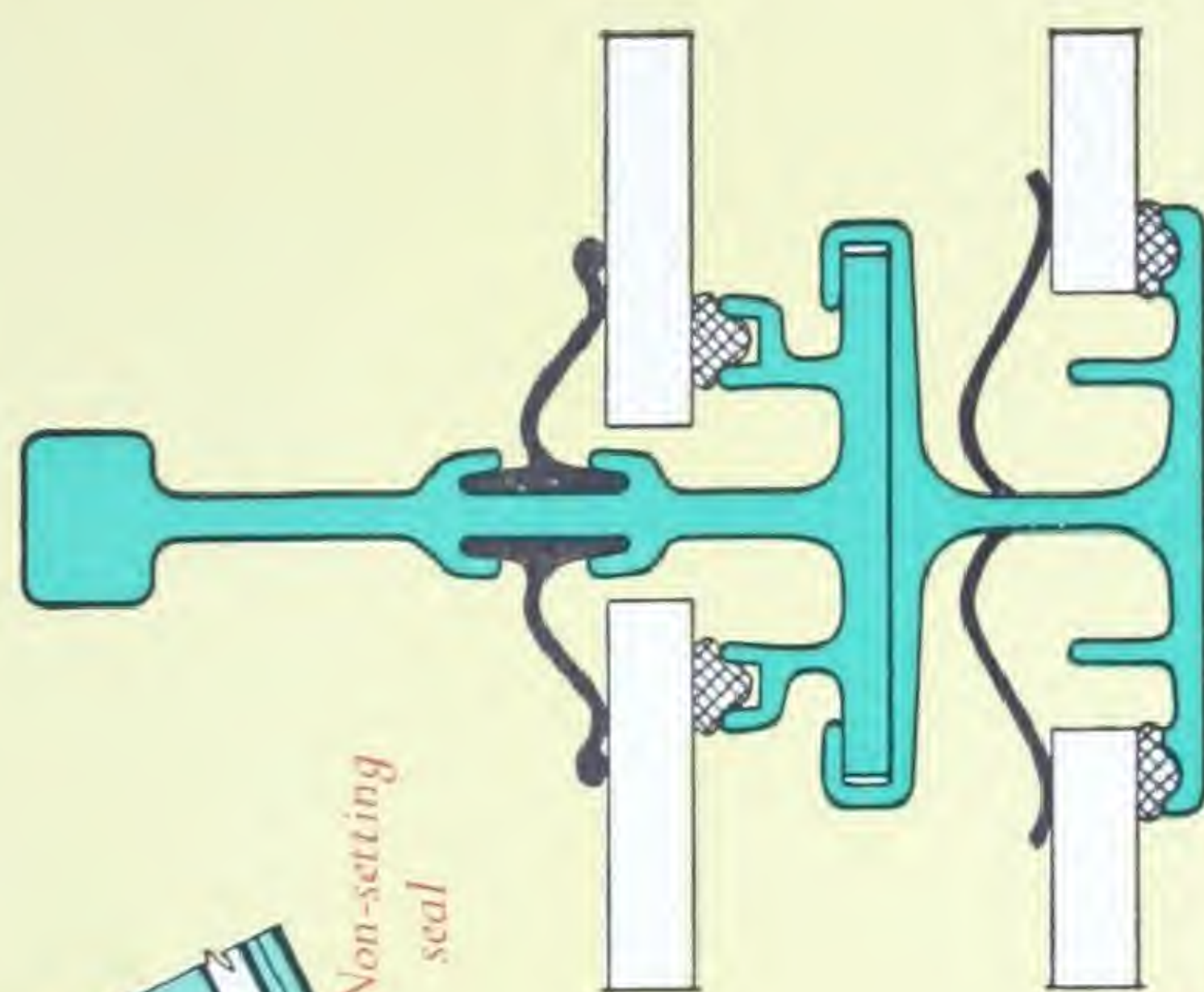
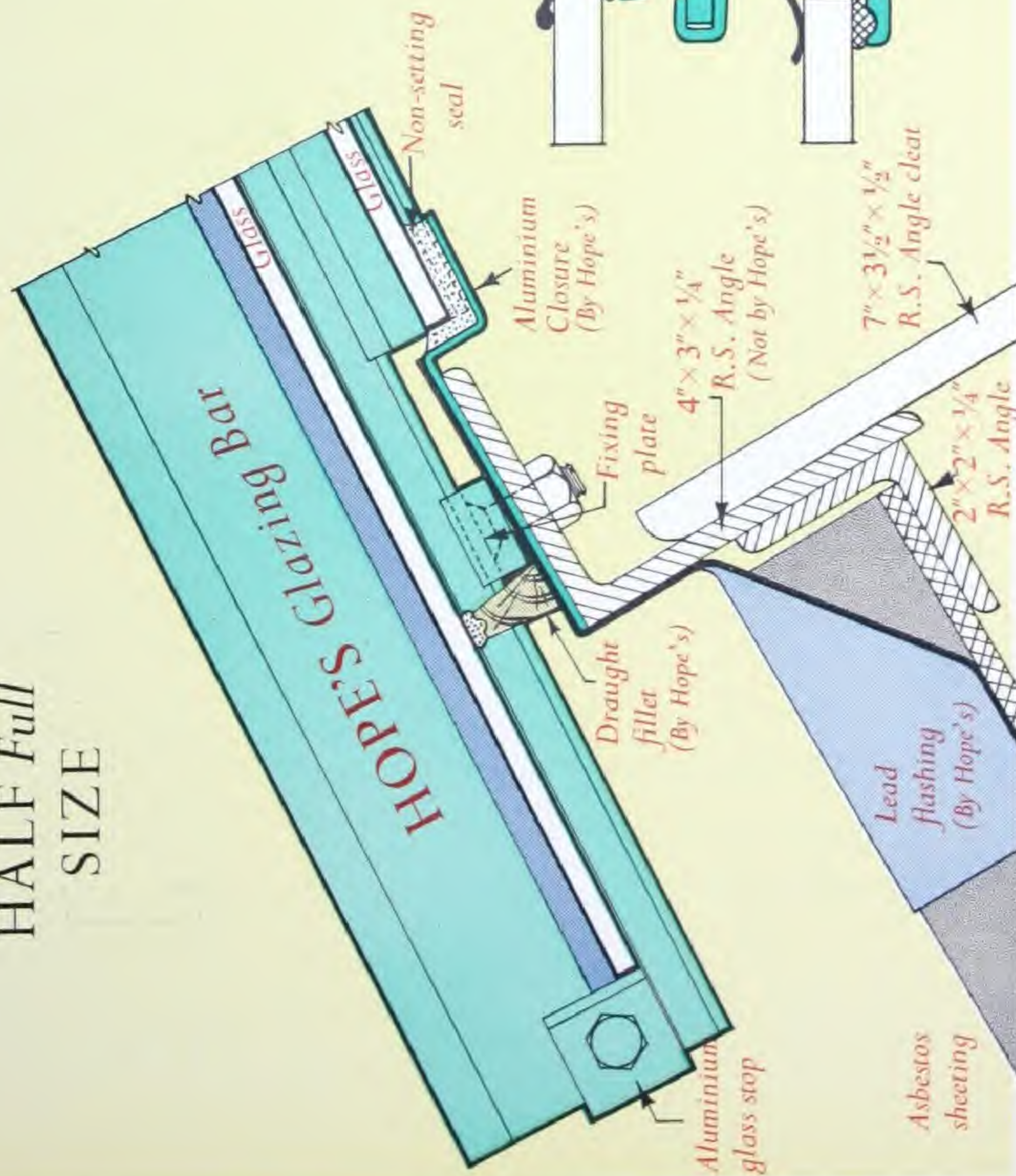
## HALF Full Size DETAILS





# SPAN ROOF Double PATENT GLAZING

Details  
HALF Full  
SIZE



FULL SIZE  
Section of  
HOPES DBL BAR

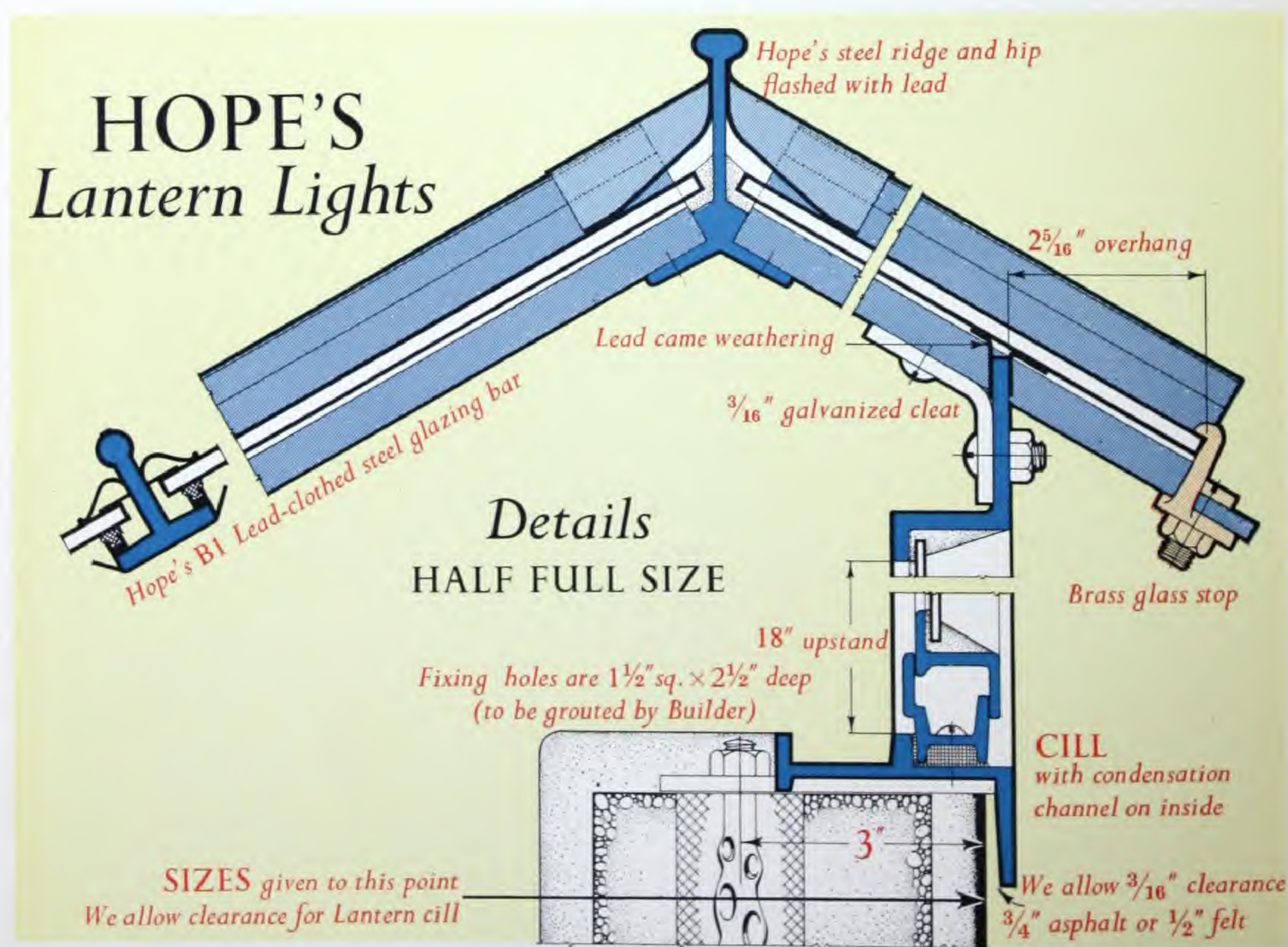


# HOPE'S

## *Lantern Lights, Skylights & Domelights*

HOPE'S Standard range of Lantern Lights and Skylights have been widely specified for many years. Recently we have introduced additional ranges of Dome Top Lanterns, Back-pitched Lean-to Lanterns, and Domelights (in both glass and 'Perspex'). Below we show our normal Lantern Light details of construction and opposite we list the standard types and sizes.

Few parts of a building get less maintenance than the skylights, and so all our materials are designed and made to survive long periods of neglect. All steelwork is HOT-DIP GALVANIZED after fabrication, all joints solid welded, ventilators formed of solid rolled double weathered casement sections, and loose weatherings are avoided. On the following pages we show details of a few of the more interesting Purpose-made Lanterns, Domes, Rooflights and Canopies which we have supplied recently, as an indication of the wide range of products carried out in this Department.





# HOPE'S Standard Lantern Lights & Skylights



## Types and Sizes

SL 44 : 4' x 4'	SL 66 : 6' x 6'	SL 108 : 10' x 8'
SL 64 : 6' x 4'	SL 86 : 8' x 6'	SL 128 : 12' x 8'
SL 84 : 8' x 4'	SL 106 : 10' x 6'	SL 1010 : 10' x 10'
SL 104 : 10' x 4'	SL 126 : 12' x 6'	SL 1210 : 12' x 10'
SL 124 : 12' x 4'	SL 88 : 8' x 8'	SL 1212 : 12' x 12'

Sizes are overall finished curb

**Standard Skylights** (made to the same sizes and details as the Lanterns listed above, but without upstand) are designated by prefix 'SS' when fixing to wood curbs or 'SST' when fixing to concrete. For further details see List No. 197.

# HOPE'S Standard Back-pitched Lean-to Lanterns



## Types and Sizes

BPT 44 : 4' x 4' with one ventilator in the upstand
BPT 64 : 6' x 4' with one ventilator in the upstand
BPT 84 : 8' x 4' with one ventilator in the upstand
BPT 104 : 10' x 4' with two ventilators in the upstand
BPT 124 : 12' x 4' with two ventilators in the upstand

Sizes are overall finished curb

Upstands are 18" high only (sight size)

For further details see List No. 345.

# HOPE'S Standard Dome Top Lantern Lights



## Overall Sizes (finished curb sizes are printed in red)

Dome 36" x 36" (32" x 32")	Dome 60" x 42" (56" x 38")
42" x 42" (38" x 38")	72" x 48" (68" x 44")
48" x 36" (44" x 32")	96" x 48" (92" x 44")
48" x 48" (44" x 44")	72" x 72" (68" x 68")

Domes are 'Perspex', 1/4" thick

(Alternative: rough cast glass, 3/8" thick)

Upstands are 12" or 18" high, sight size.

For further details see List No. 339.

# HOPE'S Standard Domelights

in Glass—3/8" Roughcast  
or 'Perspex'—1/4" Opal



## Overall Sizes

Circular:	24" 30" 36" 42" 48" 54" 60" 66" 72"
Rectangular:	24" x 24" 36" x 36" 42" x 42" 48" x 36"
	48" x 48" 60" x 42" 60" x 60" 72" x 72" 72" x 48" 96" x 48"

■ Supplied in glass only

■ Supplied in glass or 'Perspex'

For further details see: List No. 346 'Perspex' Domelights, List No. 277 (Circular) & List No. 376 (Rectangular) Glass Domelights.



# HOPE'S *Lanterns & Laylights*



## BIRMINGHAM UNIVERSITY

## *Mechanical Engineering Block*

*Peacock and Bewlay, Architects*

This glazed ceiling over a drawing office provides daylight so evenly distributed that if a pencil is stood on end in the centre of the room no appreciable shadow is discernible. It measures 70' x 45', and is coffered to provide invisible means of ventilation, being stepped down from the centre in three levels with spaces between, through which circulates fresh air from ventilators in the lantern light above.

Ventilators are electrically operated from a control panel which indicates the degree of opening, and is conveniently placed in the drawing office below.

The ceiling light is glazed with 'Plyglass', the inner sheet of which is white obscured glass, while the cavity between the two sheets contains a layer of fibreglass to reduce the solar heat in summer, and prevent heat loss in winter.

The lantern light is glazed with patent glazing bars and wire-reinforced glass. Access is provided through glazed doors at the lantern ends to permit cleaning and replacement of electric light bulbs.



*Exterior of Lantern Light*



*Interior, above glazed ceiling*



# HOPE'S *Sliding Rooflights*



*The MIRABELLE RESTAURANT, Curzon Street, London, W.1*  
These semicircular rooflights slide back noiselessly at the touch of an electric button giving a clear opening to the sky on hot summer nights.



# HOPE'S *Glazed Canopies*



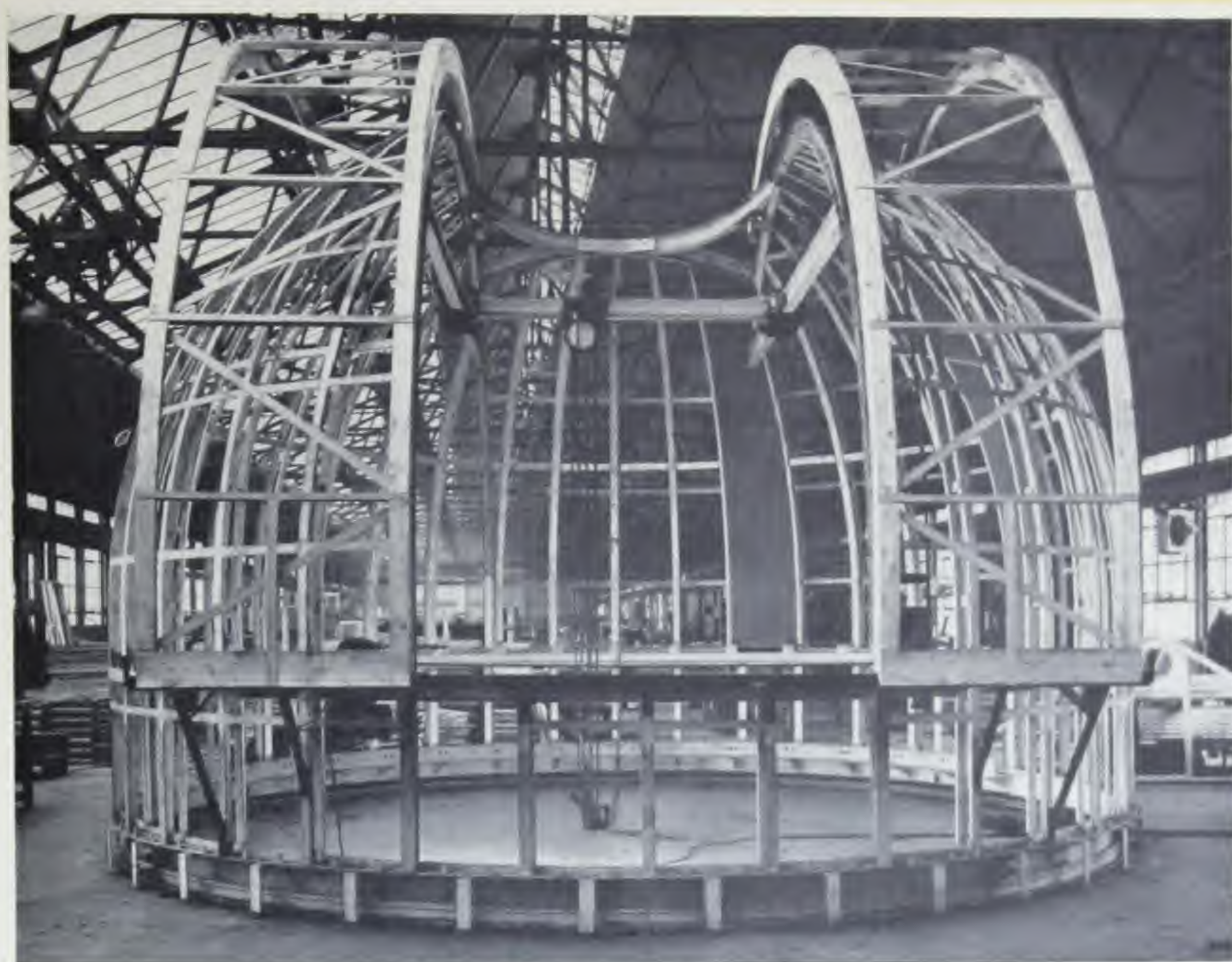
VICTORIA PASSENGER STATION, MANCHESTER *Main Entrance*  
*J. Taylor Thompson, M.I.C.E., Chief Civil Engineer, British Railways*  
Cantilever Canopy 197' long with galvanized cantilevers, fascia and eaves gutter



SWAN VILLAGE CANTEEN for WEST MIDLANDS GAS BOARD  
*S. N. Cooke & Partners, Chartered Architects*  
Valance type canopy suspended below a lantern light, through which steam is extracted by means of opening casements and electric fan



# OBSERVATORY DOME



*The Observatory Dome during assembly in our Lantern Light Shop*

## UNIVERSITY OF ST. ANDREWS, SCOTLAND

*David Carr, F.R.I.B.A., F.R.I.A.S. and Stuart R. Matthew, A.R.I.B.A., A.R.I.A.S., Architects*

**The Steel Frame** of this complex structure, 18' 6" high, 24' 3" diameter and weighing 9½ tons, was designed, fabricated and assembled by our Lantern Light Department. It is lined with masonite ½" thick, and covered externally with hardboard ¼" thick, which in turn is dressed with an outer skin of 20g super-purity aluminium. This double skin is secured to both sides of the structural framework enclosing an insulating air space of 4¼" between the members.

**Operation and Control** of the Dome and Observer's chair, involving 7 separate mechanical movements, was devised and installed by our Gearing Department to provide the Observer with complete control, by push-button and hand gear, from his chair.

Of these 7 mechanical movements, three are involved in controlling the dome, and four in moving the Operator's chair.

**The Dome:** (1) may be revolved on its base by an electric motor and reduction gear (2) the shutters slide horizontally away from each other, leaving an aperture 8' 0" wide through which the telescope is pointed, and (3) a blind may be automatically drawn up and over the aperture to provide protection for the observer.

**The Observer's Chair:** (4) slides to the right or left around the inside wall of the dome (5) can be raised or lowered vertically (6) swivels freely through 180° on a cantilevered support—all controlled by hydraulic gear—and (7) pivots on its own axis by hand-operated gear. All these movements are arranged for easy and convenient operation from the Observer's chair.



*Dome during erection*



*Demonstration Model*



# HENRY HOPE & SONS LTD SMETHWICK, BIRMINGHAM, 40

Telephone: SMethwick 0891

Telegrams: Conservatory Telex Birmingham

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LONDON	Office & Showrooms 17 Berners St., W.1 Telephone: MUSeum 8412
BELFAST	Scottish Mutual Assurance Bldgs., 16 Donegall Square South Telephone: Belfast 22687
BIRMINGHAM	City Chambers, 319 Broad Street Telephone: MIDland 0398
BRISTOL	3 Berkeley Square, 8 Telephone: Bristol 23800
DONCASTER	Wheatley Hall Road Telephone: Doncaster 61028
GLASGOW	1 Blythwood Square Telephone: City 4928
LEEDS	Provincial House, Albion Street Telephone: Leeds 20708-9
LIVERPOOL	49 Rodney Street Telephone: Liverpool Royal 1594
MANCHESTER	123-4 Royal Exchange, 2 Telephone: Blackfriars 8310
NEWCASTLE-ON-TYNE	Maritime Bldgs., King St., 1 Telephone: Newcastle 20260
SEVENOAKS	London Road, Riverhead, Sevenoaks, Kent Telephone: Sevenoaks 51021-2
SWANSEA	Powell Duffryn House, Adelaide St. Telephone: Swansea 55342

*and representatives in principal towns*

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## ASSOCIATED COMPANIES OVERSEAS

HOPE'S WINDOWS INC., Jamestown, NEW YORK & 101 Park Avenue, NEW YORK CITY  
CRITTALL-HOPE METAL WINDOWS (S.A) LTD., Industria, JOHANNESBURG  
also at PORT ELIZABETH, CAPETOWN & DURBAN

CRITTALL-HOPE (RHODESIA) LTD., Salisbury, SOUTHERN RHODESIA

SMITH & PEARSON LTD., Newcomen Iron Works, Ossory Road, North Strand, DUBLIN

HAWKER SIDDELEY AUSTRALIA (PTY) LTD., 100 Victoria Parade, E. Melbourne, AUSTRALIA

S.A. VITRAGE 'ECLIPSE' 11 & 11 bis Passage St. Sebastien, Paris 11e, PARIS

## AGENTS THROUGHOUT THE WORLD



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# HOPE'S *Products*

## METAL WINDOWS *of all kinds*

Purpose-made Windows in galvanized steel, bronze or aluminium for all buildings where quality is of first importance	<i>List No. 260</i>
Bronze Windows for Passenger Ships	<i>List No. 232</i>
Double-hung vertically sliding windows in aluminium	<i>List No. 349</i>
Curtain Walling in galvanized steel or aluminium	<i>List No. 295</i>
Standard Domestic Windows and Doors	<i>List No. 356</i>
Standard Reversible Windows for multi-storey flats	<i>List No. 356A</i>
Standard Lok'd Bar Sash for industrial buildings	<i>List No. 309</i>
Standard Projected Windows	<i>List No. 347</i>
Standard Tropical Projected Windows— <i>special overseas types</i>	<i>List No. 370</i>
Ventana Louvres	<i>List No. 372</i>
Flush panel glazed screens	<i>List No. 340</i>

## PRESSED METAL PRODUCTS *for the building trade*

Standard Doorframes	<i>List No. 254</i>
Window Subframes, cills and trim	<i>List No. 354</i>
Hollow metal doors	<i>List No. 283</i>
Tropical Doors and Windows for godowns and labour quarters	<i>List No. 283</i>
Sunbreakers, fixed or movable, in steel or aluminium	<i>List No. 283</i>
Pressed Steel Balconies for multi-storey flats	<i>List No. 355</i>

## ROOF GLAZING, *Lantern Lights, Domes and Glazed Canopies as described in this catalogue*

## GEARING *for remote control of opening lights, casements, etc., hand, electric or hydraulically operated*

Cable Control Gear:	<i>List No. 364</i>
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## BUS SHELTERS

*List Nos. 331 and 363*

## HARDWARE *and Door Furniture*

Metal Letters	<i>List No. 360</i>
Rainwater Heads	<i>List Nos. 359 and 371</i>
	<i>List No. 198</i>







